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# ANNUAL REPORT

OF

# THE MINES DIVISION

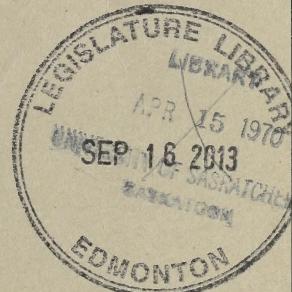
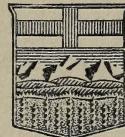
OF THE

## Department of Mines and Minerals

OF THE

PROVINCE OF ALBERTA

1949



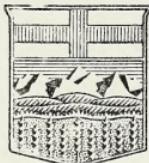
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1950





ANNUAL REPORT  
OF  
**THE MINES DIVISION**  
OF THE  
**Department of Mines and Minerals**  
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Edmonton, Alberta,  
February 14th, 1950.

To THE HON. N. E. TANNER,  
*Minister of Mines and Minerals.*

SIR:

I herewith submit the Report of the Mines Division for the year ending December 31st, 1949.

Respectfully submitted,

JOHN CRAWFORD,  
*Director of Mines.*



# ANNUAL REPORT OF THE MINES DIVISION FOR THE YEAR ENDING DECEMBER 31, 1949

(JOHN CRAWFORD, *Director of Mines*)

The output of coal produced from mines in the Province during the year 1949 was 8,616,983 tons, with a valuation of \$44,541,538. This shows an increase of 505,970 tons over the tonnage produced in 1948, which was 8,111,013 tons, and an increase in valuation of \$2,666,494.

During the year the number of manshifts totalled 1,910,922. This is an increase of 16,085 manshifts in comparison with 1948, in that year the number of manshifts totalled 1,894,837.

The disposition of coal during the year was as follows:

	Tons
Sold for consumption in Alberta.....	1,614,306
Sold for consumption in other Provinces.....	2,941,454
Sold to the United States.....	45,972
Sold for shipment to China.....	3,475
Sold to railroad companies.....	3,012,425
Used making briquettes.....	434,912
Used making coke.....	91,361
Used under colliery boilers.....	161,063
Used by colliery railroads.....	1,175
Put to stock.....	192,609
Put to waste.....	291,501

The above tonnages include coal lifted from stock and waste heaps, which is not included in the total output.

Statistics indicate that production during the month of November reached an all time high; the mines producing 1,016,282 tons of coal, this experience is remarkable, particularly when it is noted there was a decrease in the number of men employed amounting to 232 as compared with the corresponding month of 1948. It is evident from the foregoing that when the mines are kept in continuous production, mechanization greatly increases the overall efficiency of operations.

Of the above output, 2,941,956 tons were produced from 94 strip mines operating in the Province. During the year production from stripping operations increased by 225,875 tons or 8.3% over 1948, in that year the total was 2,716,081 tons. There was an increase of 17 strip mines in comparison with 1948, when 77 strip mines were in operation.

It is significant to note that the production of strip mined coal is increasing each year and new stripping operations entering into production. The main reasons that may be given for the rapid development of this method of mining are: (1) accessibility (2) the erection of adequate preparation plants, where the coal is properly cleaned and sized for the market (3) workmen and officials becoming properly skilled in the technique of methods and in the handling of the heavy mechanical equipment used in this system of mining.

During the year 6 shale pits produced 94,729 tons of shale and clay from which 27,482,398 bricks and 21,026 tons of hollow tile were made. The production of shale and clay has decreased by 6,208 tons in comparison with 1948 and the number of bricks has decreased by 1,515,351. There was also a decrease in the output of hollow tile

in the amount of 2,810 tons. Of the above clay output, 1,100 tons were imported from Saskatchewan.

There were 205 mines producing coal during the year, of which 21 were opened, 51 re-opened, 60 closed and 29 abandoned. At December 31st, 180 mines were in operation.

There were 9,590 men employed during the month of December, this being a decrease of 306 in comparison with the corresponding month for 1948.

During the year there was a total of 1,312 miners' certificates, miners' provisional certificates, and miners' permits issued by the Inspectors, enabling the holders to proceed to the coal face as miners. This represents a decrease of 61 in comparison with 1948.

During the year there were 4 first class or mine managers' certificates issued, 11 second class or overman's certificates, 38 third class or examiners' certificates, 4 mine surveyors' certificates, 6 first class mine electricians' certificates, and 3 second class mine electricians' certificates granted. In addition 40 strip mine managers' certificates, 41 strip mine foreman's certificates, 10 strip mine blasters' certificates were granted.

20 examinations were held throughout the Province for coal miners' certificates of competency, and 441 certificates issued to successful candidates. There were also 732 miners' permits and 139 miners' provisional certificates issued by the inspection staff. 40 duplicate miners' certificates were issued by this office.

Samples of mine air were taken during the year by the Inspectors and forwarded to the Chemistry Branch of the Department of Mines, Ottawa, for analysis. This has been done in addition to the tests made with the M.S.A. methane and other gas detectors.

Samples of coal and coal-dust were collected and forwarded to the Research Council of Alberta, Edmonton, for analysis.

All fatal and serious accidents have been investigated by the Inspectors, who also attended the inquests held in their districts, this being in addition to the regular inspection of the mines. All complaints made to the Department were investigated.

There were 31 prosecutions instituted for contraventions of the Coal Mines Regulation Act, made up as follows: 8 owners, 6 mine managers, 2 overmen, 2 examiners, 2 foremen, 1 blaster, 7 miners, 3 labourers.

The purchased electrical power by the mines was 53,590,982 k.w. hours, this being an increase of 3,866,617 k.w. hours over 1948. During the year the number of mines using electrical power was 92, an increase of 5 over 1948. The number of electrical coal cutting machines in use was 184, the same as in 1948, and the total horse power of electrical motors in use both above and below ground was 61,663 H.P., an increase of 1,490 H.P. over 1948. The above-mentioned statistics continue to indicate a progressive trend of electrification in the mines.

In the month of August, 1947, the first permissible diesel locomotive equipped with every form of safety device was introduced into the Adanac Mine operated by the West Canadian Collieries

Ltd. under highly restrictive conditions. Since that time four additional machines have been granted permission. The locomotives of this type presently operating in the Province, range from 50 to 100 H.P. A very close check has been kept on the behaviour of these machines under normal operating conditions by our Field Inspectors and their reports indicate they are giving highly satisfactory service.

It will be noted from the reports of the District and Electrical Inspectors that in the matter of installation of new equipment, very satisfactory progress is being made.

The trend toward the use of protective equipment in the mines is proceeding satisfactorily, there being in use during 1949: 5,980 hard hats, 3,905 pairs of safety shoes, 757 pairs of goggles, 401 pairs of knee pads.

The number of fatal accidents during the year was 13, the same as in 1948. This equals 1.51 fatals per million tons of coal produced and compares very favourably with the average rate in the United States and Great Britain.

As regards the aforementioned fatalities, 2 occurred on the surface and 11 underground, as follows: fall of coal 5, fall of rock 2, gases 1, haulage 4, miscellaneous 1. There was a noticeable increase in the number of accidents reported to this office during the year in comparison with 1948, i.e. during 1949 a total of 210 accidents were reported to this office while the corresponding total for 1948 was 197.

There were no changes in the staff of the Mines Division during the year.

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#### SUMMARY OF INFORMATION COMPILED FROM THE REPORTS OF THE INSPECTORS

(J. A. DUTTON, *Assistant to the Director of Mines*)

Notwithstanding the warning issued in my previous report eight charges were laid during the year against coal mine officials for failure to send or cause to be sent to this Department Coal Operators' Monthly Statements on or before the 15th day of each month as required under the provisions of the Coal Mines Regulation Act. Three of these charges are still awaiting trial but convictions were obtained in the others, resulting in fines with costs amounting to \$154.00. The offenders in this connection were entirely among the operators of small mines and complaint was laid only after repeated demands for the returns failed to give results.

The Board of Examiners for Strip Mine Certificates convened on two separate occasions to deal with applications for certificates without examination. 93 applications were dealt with of which 40 applications for strip mine managers' certificates, 41 applications for foreman's certificates, and 10 applications for blasters' certificates were approved. Two applications were rejected on account of insufficient experience.

The date for the granting of strip mine certificates without examination, with the exception to persons who are holders of a first class certificate of competency granted under the Coal Mines Regulation Act for the Province, expired on August 1st, 1949; following which date the original Board resigned to allow the Director of Mines to select a Board to meet the requirements of Section 6 of the Strip Mine Regulations. Messrs. G. Wiggan, S. Nicholson and myself were reappointed to represent respectively the strip mine operators, strip mine workers and the Mines Division.

From April 21st to 25th, I made an inspection tour in the Mountain Park area to deal with the matter of suspension of underground mining operations at Mine No. 282. While in this district I visited Mines Nos. 693, 775 and 905.

On May 30th I presided at the examinations for Third Class Certificates held at Nordegg. On the following day I inspected the No. 3 underground workings at Mine No. 256.

I inspected the mine workings at Mines Nos. 346 and 436 in the Drumheller district between the dates of October 11th and 15th, and also visited the following mines: Nos. 194, 367, 384, 402, 422, 864, 1258, 1421, 1496 and 1676.

On December 16th two miners employed at Mine No. 396 in the area were trapped in a pillar cave-in. One body was recovered within 5 hours from the time of accident but considerable difficulty was experienced in locating the other body. On the 20th I went to the area to assist in the recovery work, however, the miner's body had been discovered and removed from the mine before my arrival. From my observation of the scene of the fatalities and from the evidence submitted at the inquest the following evening, all persons who were employed in the hazardous recovery operations are due great praise for their efforts for performing such splendid work, which was carried out without casualties. While in the district I visited Mines Nos. 88 and 133.

During each of the aforementioned inspections and visits matters pertaining to the individual mine were discussed. The only complaint that was outstanding at the time was an acute shortage of certificated miners at some operations. This condition was somewhat eased following the return to the mine by the workmen employed in harvesting operations.

After a lapse of more than two decades the Provincial Mine Rescue and First Aid competitions were resumed on July 17th, 1949, at Edmonton, in which I assisted in the judging of the mine rescue work. Six teams in each event, comprising the winners of local competitions from different parts of the Province, participated, and proved beyond any doubt that each was capable of meeting with any emergency which might arise. The first prizes were won by the Edmonton and Canmore teams in the Mine Rescue and First Aid competitions respectively.

## EDMONTON-CAMROSE INSPECTION DISTRICT

(J. THOMSON, *District Office, Edmonton*)

There were 83 mines operating in this district as of December 31st, 1949, as follows: Camrose 5, Castor 22, Edmonton 24, Halcourt 2, Pembina 13, Prairie Creek 2, Tofield 5, Westlock 3, Whitecourt 3, Wetaskiwin 1, Rochester 1, Slave Lake 1, No Area 1.

Of this number 40 were strip pits located as follows: Camrose 4, Castor 5, Edmonton 9, Halcourt 1, Pembina 10, Prairie Creek 1, Tofield 3, Westlock 3, Whitecourt 1, Rochester 1, Slave Lake 1, No Area 1.

I inspected all operating mines and made 171 inspections, all serious accidents and complaints were investigated.

171 inspections were also made for The Workmen's Compensation Board.

Two miners' examinations were held at Edmonton on January 19th, 1949 and October 12th, 1949; one miners' examination was held at Heisler October 4th, 1949. 72 candidates passed the examination and were issued miners' certificates. There were 97 miners' permits and 29 miners' provisional certificates issued by this office.

Thirteen coal samples were collected and sent to the Research Council, University of Alberta, for analysis.

I recommended that a road allowance lease be issued to Mine No. 1653, Hinton Hard Coal Co., Hinton.

Sixteen trade names were registered under The Coal Sales Act.

There were four prosecutions in the district: one Overman for permitting an excess number of men to work in the mine than provided for under the terms of The Mines Act; one Overman for employing two men, without miners' certificates or miners' permits, at the working face; two miners for working at the working face without miners' certificates or miners' permits.

Thirteen new mines were opened, located as follows: No. 1689, slope opening, by McPherson and Kroetch at Heisler; No. 1690, slope opening, by Schon and Rollof at Tomahawk; No. 1691, strip pit, by Shannon and Lang at Halkirk; No. 1693, strip pit by Michael LaTosky at Warburg; No. 1694, drift opening, by William A. Jones, Jr. at Donalda; No. 1696, strip pit, by Adelard Houle at Morinville; No. 1697, shaft opening by Muyres and Sons at Forestburg; No. 1701, strip pit, by Gailey and Sons at St. Francis; No. 1702, slope opening by Strickland and Partners at Heisler; No. 1703, slope opening, by Wisla Brothers at Rosalind; No. 1704, strip pit, by Michael Romanuk at Halcourt; No. 1706, strip pit, by Capostinsky and Woodley at Hinton; No. 1709, strip pit, by Miller and Knull at Telfordville.

Four mines were re-opened: No. 953 by Don Wiltse and Co. at Forestburg; No. 1409, strip pit, by Gainford Collieries Ltd. at Gainford; No. 1569, strip pit, by Alex Watson at Blue Ridge; No. 1612, drift opening, by R. Prichard at Blue Ridge.

Eight mines changed ownership as follows: No. 1248, Mitchinson to Gerla and Runge; No. 1614, A. Sorkin to Neilson, Milne and Milne; No. 1650, E. Deen to John Lynass; No. 1683, Donvie Collieries Ltd. to Continental Collieries Ltd.; No. 1653, Woodley Bros. to Hinton Hard Coal Co.; No. 1435, Otteson and Tucker to William Jones, Sr.; No. 1578, Bish and Sons to Forestburg Collieries Ltd.; No. 1592, Swanson Collieries Ltd. to Forbes and Lang.

Three mines closed down as follows: No. 1123, McKinnon at Graminia; No. 1683, Donvie Collieries Ltd. at Seba Beach; No. 1690, Schon and Rollof at Tomahawk.

Six mines were abandoned as follows: No. 1034, Black Point at Ellerslie; No. 911, Strickland and Partners at Heisler; No. 1693, LaTosky at Warburg; No. 1588, Cage Bros. at Halcourt; No. 1643, Johnston at Grande Prairie; No. 1651, Grubb at Halcourt.

There were no gas ignitions but a small fire destroyed the office and bunk house at Mine No. 1696 at Morinville.

No domestic permits were issued.

Eleven accidents were reported to this office, four from falls of coal, four from falls of rock, one on the haulage, and two from miscellaneous causes. I am pleased to report there were no fatalities in my district, but I was called upon to conduct an inquest at Mine No. 771, Foothills, during the absence of the Inspector for that district.

Difficulty is being experienced by the operators in this district during spring and summer months in obtaining markets for coal of all sizes, this means large lay-offs resulting in two or three days' work per week for the men still employed.

The following is a list of improvements and installations at the various mines in this district during the year:

Mine No. 99, The Great West Coal Co. Ltd., double unit long wall commenced; Mancha locomotive, storage battery type; egg picking belt on tipple; new rope on slope; the whole slope re-tied and cement walls rebuilt where necessary.

Mine No. 1046, Alberta Coal Co. Ltd., new tipple constructed in order to increase output.

Mine No. 1266, Edmonton Collieries Ltd., this mine is now completely electrified and the new installations consist of shaker screens; elevator; rotary screen; CE7 coal cutters; new loading ramp.

Mine No. 1316, Samis Collieries, shaker screens; overhead tractor shovel for the loading of spillage from the ground.

Mine No. 1495, Pembina Collieries Ltd., new tipple with shaker screens.

Mine No. 1463, Riverdale Coal Co., Ltd., long wall equipment consisting of 300 feet of jigger conveyors; one Sullivan long wall machine; tugger hoist and main and tail haulage.

Mine No. 1409, Gainford Collieries Ltd., new tipple with shaker screens and rotary screen.

Mine No. 1627, Dickinson, Knight and Dickinson, vibrator screens.

Mine No. 1628, Blue Point Mine, main and tail haulage driven by compressed air; small belt elevator with feed screw picking up all spillage from the bins.

Mine No. 1641, A. Horkulak, main and tail haulage driven from engine on surface; electricity for pumping purposes.

Mine No. 1614, Stettler Coal Co., new tipple with bin capacity for 50 tons lump, 30 tons nut, and 30 tons stoker; rotary screen; 1½ yd. overhead loader; one tractor and Letourneau loader.

Mine No. 1653, Hinton Hard Coal Co., one 15 K.V.A. generator, diesel driven; one Syskol coal cutter; centrifugal pump; fan; electric hoist being installed.

Mine No. 1657, Lidgett and L. Opheim, shaker screens.

Mine No. 1674, Michael and Martin Wisla, air picks.

Mine No. 1677, John C. Reed and Son, rotary screen.

Mine No. 1702, Dolanz, Dolanz and Strickland, one 50 K.V.A. generator driven by 95 H.P. mobile unit; one CE7 Sullivan coal cutter.

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#### CALGARY INSPECTION DISTRICT

(W. E. G. HALL, *District Office, Calgary*)

There were 15 mines operating in this district during the year as follows: Cascade 3, Morley 1, Pekisko 1, Nordegg 2, Saunders 2, Carbon 4, Highwood 2.

Of this number 3 are strip pits located as follows: Cascade 1, Nordegg 1, Highwood 1. Each of the aforementioned mines located in the Cascade and Nordegg areas possess underground operations in addition to the strip mine; i.e. Kananaskis Exploration and Development Co. Ltd., and Brazeau Collieries Ltd., whereas Sheep River Coal Co. located in Highwood area is a strip pit only.

During the year there were 70 inspections made and reported upon in accordance with Section 5 of The Coal Mines Regulation Act. All serious accidents and complaints were investigated and reports on same were forwarded to the Director of Mines, Edmonton.

During the year, 58 inspections were made for The Workmen's Compensation Board, all of which were reported direct to the Board.

Two Miners' examinations were held, one in Nordegg on April 13th, 1949, and the other was held in Alexo on November 16th, 1949. 28 candidates passed the examination and were granted miners' certificates. There were 120 miners' permits and 26 miners' provisional certificates granted by this office.

Two coal samples were collected and sent to the Research Council, University of Alberta, for analysis.

The original P. Burns mine on Sheep River which was re-opened in 1948 by the Alberta Hard Coals Ltd. as mine No. 1625 was closed on February 17th, 1949. This mine was again re-opened by Hard Coal Producers Ltd. on September 24th, 1949.

Mine No. 1619, operated by B. Ainsly and Sons has been temporarily closed since March, 1949. Mine No. 1638, operated by Sheep River Coal Co. Ltd., a subsidiary of the Western Canada Coal Corporation was closed December 22nd, 1949, and at this date has not resumed operations.

Mine No. 1600, operated by the Peerless Coal Co., Carbon, was abandoned in June, 1949. An abandonment plan was submitted and the 2 slope openings were filled with earth, all in accordance with Section 96 of The Coal Mines Regulation Act.

During the year 26 accidents were reported to this office, which I regret to say, included one fatality, same occurring on the surface. Of the twenty-five remaining accidents, three occurred on the surface while the balance of twenty-two were underground. As is customary in coal mining the majority of the accidents were attributed to falls and haulage.

I am happy to report that there were no disagreements between management and labour during the year.

Due to a shortage of railway cars the number of days lost as regards the following mines were: Canmore 1, Saunders 2, Brazeau 4- $\frac{2}{3}$ . Various other causes of non-production such as holidays, mine disability, snow, accidents, lack of crew, etc. were responsible for a considerable loss of time and tonnage.

Based on a general survey of the Calgary district it would seem that the manpower situation has been the best for years, though in the early fall there was a shortage, at the present time it is adequate at all mines.

Some time was lost due to a lack of orders, Brazeau 10 days lost; Saunders 46 days lost. The production of coal in this district, due to the days lost, has been reduced considerably.

The following is a list of installations and improvements which have taken place at the various mines in this district during the year:

At Mine No. 2, operated by the Canmore Mines Ltd., the following have been reported: prospecting and development of the several seams have continued throughout the year. The electric driven air compressors, both high and low, purchased last year have been installed and put in service. The outside trolley locomotive haulage serving this mine is in operation, one 15 ton locomotive now in use.

At Mines Nos. 256 and 1585, operated by the Brazeau Collieries Ltd., the following have been reported: 1 new 250 ton coal bin at 12 level; 1 new 200 H.P. boiler H.R.T. installed; 1 new asphalt shed and insulation on asphalt tanks; new magnesium insulation on asphalt and steam lines; 1 new drier fan has been installed; 1 new escalator extension and house; new ramp for town briquette bin erected; new escalator and roofs for No. 2 briquetting plant; new gantry to dust bins Nos. 1, 2 and 4 plants; new fan house for No. 2 Mine; new bore hole for power line in No. 3 Mine; new Kinney pump for asphalt and new shed for same; weigh scales remodeled and new scale house; new gantry on main belt to box car loader; new arms screen for briquette screening; new Jeffry coal crusher; new belt house at coal chute.

At Mine No. 388, operated by the Bighorn and Saunders Creek Collieries Ltd., the following have been reported: new switch board in power house; new pole line to fan and townsite; connected to Calgary Power on December 10th, 1949.

At Mine No. 852, operated by the Alexo Coal Co., the following has been reported: considerable improvement work has been done in renewing transformer banks, pole line, and wiring on the surface.

At Mine No. 1060, operated by the East Carbon Coal Co., the following has been reported: a main and tail haulage system has been put in operation on the main entry, same being electrically driven from the surface.

At Mine No. 1638, operated by the Sheep River Coal Co., the following has been reported: a new tipple equipped with coal crusher, belt conveyor and screens have been built at Okotoks.

At Mine No. 1667, operated by the Kananaskis Exploration and Development Co., the following have been reported: a new tipple and preparation plant has been built at Ozada, same having a capacity of 80 tons per hour. A new briquetting plant has been installed in tipple, same having a capacity of 11 tons per hour. Underground the following machinery has been installed: 1 Goodman permissible shaker conveyor with duckbill; 2 Goodman permissible short wall coal cutters; 1 Chicago permissible coal drill; 2 Brownie blowers, 5 H.P. permissible motor; 1 Goodman permissible shaker conveyor; 2 Goodman permissible shaker conveyors; 2 Meco permissible shaker conveyors; 46 Model P Edison cap lamps.

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## LETHBRIDGE INSPECTION DISTRICT

(E. H. MORGAN, *District Office, Lethbridge*)

There were 30 mines operating in this district during 1949, as follows: Brooks 1, Champion 4, Lethbridge 8, Milk River 1, Pakowki 1, Redcliff-Medicine Hat 7, Taber 8.

Of this number 7 are strip pits located as follows: Brooks 1, Lethbridge 1, Redcliff-Medicine Hat 1, Taber 4. The number of shale pits totals 5 and are located in the Redcliff-Medicine Hat area.

During the year there were 128 inspections made and reported upon in accordance with Section 5 of The Coal Mines Regulation Act. All serious accidents and complaints were investigated and reported to the office of the Director of Mines.

In addition there were 65 inspections made for the Workmen's Compensation Board which included the investigation of a fatal accident and representing the Workmen's Compensation Board at the inquest held at Redcliff.

Two miners' examinations were held at Lethbridge on January 15th, 1949, and December 10th, 1949. 59 candidates passed the examination and were granted miners' certificates. In addition this office issued 19 miners' provisional certificates and 82 miners' permits.

Three coal samples were collected and sent to the Research Council, University of Alberta, for analysis.

Two trade names were registered under The Coal Sales Act.

There were five prosecutions in this district: the operator of a strip mine near Groton was prosecuted for operating a strip mine without permission from the Director of Mines and also for the lack of care and storage of explosives; the operator of a strip mine near Medicine Hat was prosecuted for operating without permission from the Director of Mines, and was also prosecuted for not notifying the District Inspector and the Director of Mines of the appointment, name and address of the overman in charge of operations; the operator of a strip mine near Grassy Lake was prosecuted for operating without permission from the Director of Mines.

Three new mines were opened, located as follows: No. 1672, underground mine, operated by J. D. Vogel, Rolling Hills; No. 1705, strip mine, operated by J. P. Neufeld, Grassy Lake; No. 1707, strip mine, operated by G. A. Naylor, Medicine Hat.

Two mines were re-opened: No. 1137, an underground mine previously operated by A. Cattoni in 1940, now operated by Carlo Travaglia, Champion; No. 1318, an underground mine, previously operated by William Raeder in 1947, now operated by Martin R. Johnson and Edward Davies of Elkwater.

The number of accidents reported to this office were 21; 4 from falls of coal, 4 from falls of rock, 1 from pushing cars, 2 from horse haulage, 4 from mechanical haulage, 4 from loading coal, 1 from flying cardox shell, 1 from loading in railway car.

There was no labour trouble during the year, much to the credit of both employers and employees, any and every difference of opinion that they had regarding contract obligations were settled without involving an hour's loss of work.

The manpower situation here is fairly good but experienced miners are not too plentiful, however the situation would have been much worse if we had no training scheme for displaced persons for quite a number of these men have become useful miners.

There was a substantial loss of work due to lack of orders, the average days lost for the mines in the Lethbridge district totalled 63½ days. Mine No. 1263, Lethbridge Collieries Ltd., Shaughnessy, lost one shift due to failing to get the necessary railway cars, losing 75 days in all.

Due to the mines in the Lethbridge area losing so many days during the summer months, they were unable to supply their customers with the smaller sized coals, consequently the smaller mines in the surrounding district were able to dispose of their small coal piles; this seems to foretell that the demand for the smaller sized coal in this district will at least equal the supply.

The following is a list of improvements and installations at the various mines in this district during the year:

Mine No. 1095, Chester, Crabb and Chester, a McDougall self-oiling bulldozer power pump installed underground; an 8 ft. diameter Keith ventilating fan operated by a 15 H.P. 1,200 R.P.M. motor located at the new air-shaft.

Mine No. 1263, Lethbridge Collieries Ltd., one 4-inch centrifugal pump operated by a 40 H.P. motor; one Sutcliffe gate conveyor, 1,000 ft. long and 36 inches wide, operated by a 35 H.P. motor.

Mine No. 1434, Lethbridge Collieries Ltd., one Huwood drill panel and three drills; one Clarkson 24bb mobile loader; one Jeffrey 52B, 30-inch by 300 ft. belt conveyor; one Cowlishaw-Walker 20-inch by 250 ft. chain conveyor; 25 new mine cars; on the surface they installed new current transformers to change the primary voltage from 13.2 KV delta to 22 KV star, and a milling machine converter fitted to large shop lathe.

Mine No. 1581, J. J. Hamilton Coal Co., a small belt conveyor operated by a 2 H.P. motor was installed at the tipple to convey egg coal.

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#### COALSPUR-MOUNTAIN PARK INSPECTION DISTRICT

(A. MUIR, *District Office, Edson*)

There were 15 mines operating in this district during 1949 as follows: Coalspur 6, Mountain Park 9.

Of this number eight are strip pits located as follows: Coalspur 4, Mountain Park 4.

There were 138 inspections made in the district during the year. Additional visits were also made to various mines in connection with investigations regarding accidents and complaints.

94 inspections were made for The Workmen's Compensation Board, including additional visits for the purpose of investigating serious accidents.

One examination for miners' certificates was held at Mercoal, March 30th, 1949; a total of twenty candidates presented themselves, all of whom were successful. 73 miners' permits and 6 miners' provisional certificates were also issued.

Six coal samples were collected, and forwarded to the Research Council, University of Alberta, for analysis.

Several mine air samples were taken at Mercoal, this mine was installing several seals on the west side of the slope and mine air samples were taken as a safety measure against leakage. All samples were forwarded to the Chemistry Branch of the Department of Mines and Resources, Ottawa, for analysis.

One trade name was registered under The Coal Sales Act.

Nine prosecutions were instituted for contraventions of The Coal Mines Regulation Act: Luscar Coals Ltd., Luscar, 2 prosecutions in connection with explosives; Foothills Collieries Ltd., Foothills, 1 prosecution for allowing persons to be exposed to danger; Cadomin Coal Co., Cadomin, 2 prosecutions in connection with explosives; Lakeside Coals Ltd., Robb, 2 prosecutions for failure to carry out the shot firing regulations; King Coal and Lumber Ltd., Coalspur, 2 prosecutions, irregularities with regard to the fencing of machinery.

One underground mine at Luscar was opened, this is just in the stages of development. Two new strip pits were opened, i.e. Lakeside Coals Ltd., Robb, and King Coal and Lumber Ltd., Coalspur.

Mine No. 775, Lakeside Coals Ltd., Robb, changed hands from McBain and McBain of Edmonton to its present owners, B. J. Kern, R. D. Trumble, A. L. Kerr and A. Booker, all of Saskatchewan.

Two mines were temporarily closed, namely Lakeside Coals Ltd., Robb, and King Coal and Lumber Co. at Coalspur; the latter mine has again resumed operations.

The No. 1 slope of Mountain Park Coals Ltd., Mountain Park, was abandoned in April, 1949, and subsequently flooded.

I am pleased to report that there were no ignitions of mine gases or mine fires in the district during the past year.

During 1949 two fatal accidents occurred underground and were caused by falling coal. A total of 29 serious accidents were reported, 17 of which were underground and 12 on the surface. 21 slight injuries were also reported. It was noted we had several eye accidents and it has been recommended in several instances that eye-shields be worn.

The railroad car situation has improved considerably; from July to October, there were several days lost through shortage, however I think with the present rate of production that the shortage should be overcome.

The manpower situation has improved gradually within the past two years.

157 days (approximately) were lost in this district, through lack of orders.

Conditions on the Coal Branch are very satisfactory, all mines are producing a good tonnage with a minimum of difficulty. There is a steady progressive development at each operation and future markets should be well taken care of. Extra railroad crews have been stationed at Coalspur to facilitate the enlarged tonnage that is being shipped to markets.

The following is a list of improvements and installations at the various mines in this district during the year:

Mine No. 282, Mountain Park Coals Ltd., one 600 c.f.m. compressor; one 22B  $\frac{3}{4}$  c. yd. shovel (diesel); one 14TD Euclid; one D8 Caterpillar tractor; one 54B  $2\frac{1}{2}$  c. yd. shovel (diesel); one KB2  $\frac{3}{4}$  ton truck; one  $\frac{3}{4}$  ton jeep; two Cleveland wagon drills; one 400 amp. welder; one 30M portable pump; one strip garage; one 200T coal bin and conveyor gallery; one box car loader; one coal crusher; one new trolley locomotive.

Mine No. 693, Cadomin Coal Co., underground: eight Huwood air picks. Surface: washery plant; tipple screens; pump power house; overhead loader TD 18;  $\frac{1}{2}$  ton truck; garage addition; bunkhouse; machine shop addition; tipple bins.

Mine No. 1392, Gregg River Collieries Ltd., new washhouse and lamp cabin completed; coal bin built at No. 2 mine, scale and office

building completed; crusher installed in tipple and screening; arrangements altered to make stoker coal.

Mine No. 905, Luscar Coals Ltd., Underground: one 15 ton diesel locomotive manufactured by Ruston Hornsby, not operating at this date. Surface: one 25 ton per hour briquette plant complete with buildings and loader bin and box car loader; new 250 ton truck bin complete with feeder apron and conveyor; new assay office; small garage storage house.

Mine No. 846, McLeod River Hard Coal Co. (1941) Ltd., Underground: one rectifier station installed and put in service for use with extended trolley haulage, trolley haulage system on 4 west level including one Jeffrey trolley locomotive; one G.E. battery locomotive and battery charging station; one Gardner-Denver loader has been installed making a total of three now in use. Surface: 600 KW. turbo-generator and building to house same; cooling pond intake and circulating pump with house to accommodate same; a double-deck Dillon vibrating screen for handling small coal; a loading boom and chain conveyor for handling lump coal in open cars; a retarding conveyor for handling lump coal to railway cars; an Ottumwa type SL railway car loader and house for same.

Mine No. 771, Foothills Collieries Ltd., Underground: 7½ H.P. Holman air motor to drive pump; Huwood compressed air coal augers; Huwood air picks. Surface: screw feeder for feeding small coals from screen to belt conveyor; 3 Huwood air picks; 1 United Cpn. Ash conveyor and tank; one 250 K.V.A. Goldie McCullough steam generator with Can. Allis Chalmers alternator; 3 ton Mercury truck; one Tanner gas system installed in compressed air lines; one 1000 c.f.m. Can. Ingersoll Rand steam driven compressor; during the year fire destroyed portion of the screening plant, this was rebuilt and minor changes were made; extensive repairs including rebuilding of a portion of the tipple were carried out; new lamp cabin and new electricians' shop were completed; one new cottage was erected; the camp water system was revised and a new Mono pump installed; a complete new system was installed in the shower room of the wash-house.

Mine No. 1002, Coal Valley Mining Co. Ltd., Surface: one new 315 cu. ft. Le Roi portable air compressor powered with a Caterpillar diesel engine; nine Euclid dump wagons have been purchased.

Mine No. 769, Sterling Collieries Ltd., Surface: one 2½ yard Bucyrus shovel.

Mine No. 1692, King Coal and Lumber Co., Surface: tipple with conveyor belt; picking table and shaker screen; power house with 100 KW diesel power plant; machine shop approximately 24 ft. x 30 ft.; garage approximately 30 ft. x 40 ft.; four bunkhouses 12 ft. x 20 ft.; cookhouse 12 ft. x 40 ft.; powder house 8 ft. x 12 ft.; cap house 4 ft. x 6 ft.; lunch house 8 ft. x 12 ft.

## CROWSNEST INSPECTION DISTRICT

(J. D. B. BROWN, *District Office, Blairmore*)

At the close of the year there were ten mines in operation in this district, nine being in the Crowsnest area and one in the Pincher area.

There are six strip pits in operation, all being in the Crowsnest area. Four strip pits are operated by underground mining companies in conjunction with their underground operations as follows: Mine No. 88, International Coal and Coke Co.; Mine No. 204, McGillivray Creek Coal and Coke Co. Ltd.; Mine No. 396, West Canadian Collieries Ltd.; Mine No. 87, West Canadian Collieries Ltd. The remaining strip mines are Mine No. 1695, Glacier Mine and Mine No. 1710, Racehorse Coal Co.

During the year there were 130 inspections made in this district by Mr. A. Lister, Assistant District Inspector of Mines, and myself. In addition there were visits to the various mines for the purpose of collecting coal, air and dust samples and to check on all new installations of machinery. All serious accidents and complaints were investigated and remedial measures instituted when same was required.

A total of 96 inspections were made on behalf of The Workmen's Compensation Board. A complete check was made on the mechanical condition of gear shifts on all trucks engaged in hauling coal on the surface in and around strip pits and a report was forwarded to The Workmen's Compensation Board on completion of same.

Nine examinations were held in this area in the following centres for candidates for miners' certificates—Coleman on January 31st, May 5th, August 5th, October 31st; Bellevue on February 1st, May 6th, August 8th, November 1st; Blairmore on August 13th. A total of 116 miners' certificates were issued and in addition 168 miners' permits and 23 miners' provisional certificates were issued throughout the year.

Two coal samples were collected and forwarded to the Research Council of Alberta, University of Alberta, for analysis.

Sixty-five samples of dust were collected during the year and sixty of these were tested by volumeter in the district office laboratory. The remainder were forwarded to the Research Council of Alberta for special tests.

Eleven vacuum bottle air samples were collected and forwarded to the Bureau of Mines, Department of Mines and Resources, Ottawa.

Three trade names were registered under The Coal Sales Act.

There was one prosecution during the year. A timber packer employed at the McGillivray Creek Coal and Coke Co. was convicted of being in possession of a lucifer-match.

Two strip mines were opened in this district. The Hillcrest Mohawk Collieries began operations during late summer at Glacier Mine No. 1695 on Tent Mountain at an elevation of almost 7,000 ft. Coal from this pit is hauled to their tipple in Bellevue, a distance of about 25 miles. Another strip mine began operations late in the

year when the Racehorse Coal Co., Mine No. 1710, began to build roads into their property. Coal from this mine will be hauled to the tipple of the International Mine, a distance of over 20 miles from this pit.

A change of ownership occurred when the Letcher Mine (No. 1440) was sold to the Rhodes Mining Co., the original owners of the mine.

There were 57 accidents reported to this office during the year. Five of these were fatalities. Above ground there was one fatal accident and 7 other accidents, classified as one serious and 6 slight. Below ground there were four fatalities, three taking place at the face and one on the haulage. The remaining accidents were classified as 19 serious and 25 as slight.

No time was lost on account of labour disputes at any of the mines in this district. A shortage of railroad cars caused a loss of 87 days at the various mines, and five days each were lost due to weather conditions being extremely cold, and repairs or alterations to the mines.

The shortage of manpower in this district has eased off over the year and I would advise that one mine laid off 40 men towards the end of the year; a number of these men have not yet been re-hired by the other operators in the area. Inquiries at the various mines reveals the information that all types of labour were in sufficient supply.

Lack of orders caused an average of four days lost time at the mines in this area.

The following is a list of improvements and installations at the various mines in this district during the year:

There has been an increase in the number of diesel locomotives in use underground. The International Coal and Coke Co. Ltd., Coleman, installed a 100 H.P. Huwood Hudswell diesel locomotive to haul men and materials in their A-level rock tunnel and to date its performance has been satisfactory. The West Canadian Collieries have installed a 65 H.P. Hunslet diesel locomotive in the Greenhill mine, where it supplements the 50 H.P. diesel in use which had been previously installed and used at the Adanac mine. All three locomotives have given good service.

The Adanac Mine, West Canadian Collieries Ltd., have installed a 9 ton Goodman battery locomotive; a 2300/550 volt motor-generator set was installed for charging the batteries of the Goodman locomotive. New installations underground include two Meco electrically driven, flameproof, 5 H.P. auxiliary fans with a G.A. 5 Rynolle starting panel for each fan; two Huwood air driven augur drills; a small duplex air driven de-watering pump; a two drum Dake air hoist. On the surface they have constructed a new explosive magazine, a small tool shed, a detonator house all of tile construction. New fire protection was extended to the mine mouth including hydrants and suitable hoses.

At the Greenhill Mine, West Canadian Collieries Ltd., they have introduced two G 12½ Duckbill conveyors; one 200 H.P. Allis Chalmers pump, 3 stage, on No. 7 level. On the surface they have in-

stalled a four-foot sink and float at the tipple; two 4 ft. x 10 ft. Dillon screens; also a Ruggles coal drier of 40 tons per hour capacity and two air tables. They have built a 350 ton capacity slack bin to supply the briquette plant and attendant conveyors for same. Most of the wooden construction in the tipple has been replaced with steel and asbestos sheeting. The briquette plant has been provided with a building to house the pitch tanks and completely shelter the tank cars when unloading.

The McGillivray Creek Coal and Coke Co. has constructed a second de-watering bin of 300 ton capacity, built of wood, with concrete footings and installed four conveyors to supply same.

Bellevue Mine, West Canadian Collieries Ltd., have installed a second automatic stoker on their heating plant boilers and have commenced construction on a sink and float plant addition to the tipple. They also have replaced most of the wooden tipple with steel and sheeting. They have installed two Dillon de-watering screens. A new tractor has been purchased for moving snow, and other work around the mine yard. A new fireproof oil storage house has been built.

Hillcrest Mohawk Collieries Ltd., have installed an up-to-date fire pump, and four hydrants at their tipple. They have built a new scale house, and installed a scale of 30 ton capacity. Also built was a fireproof oil and gasoline station. For use underground they purchased some Huwood air picks, two rotary drills, one Victor rotary drill, and one compressed air hoist for sinking purposes.

At the new strip mine, No. 1695, Hillcrest Mohawk Collieries Ltd., they have purchased for use in the strip pit one Dominion two yard Diesel powered shovel and a D7 Caterpillar tractor. At the pit they have built a garage, storage house and offices. At the camp located about the 6,000 ft. level they have constructed the following: A bunk house, cook house, dining room, garage, storehouse, boiler house, and a diesel electric power plant for lighting and power purposes, offices, residence and first aid room. They have built over eight miles of road from the pit to the No. 3 Highway.

The International Mine has done extensive prospecting and drilling south of the strip pits, and have opened a prospect on Section 27. On the tipple they have installed two hummer screens and attendant conveyors and carried out a good deal of reconstruction of the tipple. At the prospect they have built a mile and a half of road and rebuilt the 50 ton storage bin located at the entrance of the prospect. Underground they have installed two electric pumps of 175 H.P. and 200 H.P. on E level.

Beaver Mine at Pincher has constructed a snow shed from the mine entrance to the tipple, and built two new houses for officials, also a scale house, and installed a new scale of 15 ton capacity. They have built one mile of road from the mine to the highway. Their purchases include one T.D. 14 overhead loader, one 3 ton truck, and eight model K electric cap lamps.

## DRUMHELLER INSPECTION DISTRICT

(J. HORNE, *District Office, Drumheller*)

During the year there were 65 mines operating in this district as follows: Drumheller 24, Ardley 7, Sheerness 9, Gleichen 4, Carbon 9, Castor 9, Big Valley 3.

Of this number 27 are strip pits located as follows: Drumheller 3, Ardley 6, Sheerness 8, Big Valley 3, Carbon 3, Castor 4.

There were 271 inspections made in this inspectorate during the year by Mr. R. Shaw, Assistant District Inspector of Mines, and myself; all serious accidents were investigated and all inquests attended. In addition all complaints were investigated and reported to the Director of Mines.

212 inspections were made and reported upon for The Workmen's Compensation Board.

Examinations for miners' certificates were held in Drumheller on the following dates: January 21, 22; June 17; November 25; and 146 certificates were issued. During the year 36 miners' provisional certificates and 192 miners' permits were issued.

Three coal samples were collected and sent to the Research Council of Alberta, University of Alberta, for analysis.

Four mine air samples were collected and forwarded to the Bureau of Mines, Department of Mines and Resources, Ottawa.

Eight trade names were registered under The Coal Sales Act.

Twelve prosecutions were instituted for contraventions of The Coal Mines Regulation Act and convictions were gained in each case. Five convictions were obtained for failure to complete monthly production returns; one for illegal mining; one for unlawful entry; three for committing a dangerous act; two were prosecuted under Section 61, Coal Mines Regulation Act.

Four new mines were opened: No. 1698, Little Rock Coal; No. 1699, Handhills Coal Co.; No. 1700, Twin Hills Exploration Co. Ltd.; No. 1708, Grant Coal. The foregoing are all strip operations.

One mine was re-opened: No. 1613, B & A Coal, strip pit.

Changes of ownership occurred at the following: No. 1488, C. O. Russell to Allyn Mann Construction; No. 1613, W. Barrell to James McDowell; No. 1698, N. Filipenko to Joseph Hronek.

Ten mines were temporarily closed: No. 1515, Willow Creek Coal; No. 1544, Wayne Co-op Association Ltd.; No. 1583, Reliance Coal; No. 1589, Arcadia Coal Mines Ltd.; No. 1018, Dixie Coal; No. 1135, Kurps Coal; No. 1621, Black Jewel Coal; No. 694, Prairie Pride; No. 1666 Livingstone Coal. Mine Nos. 1018 and 1666 are strip mines, the balance are all underground mines.

Eleven mines were abandoned. The underground operations include: No. 1660 Ball Mine; No. 1680, Blackhall Coal; No. 1586, Kehl and McGladrie; No. 864, Big Valley Coal Co.; No. 1254, Thompson Coal; No. 289, Blue Blaze Coal; No. 913, Big Ben Coal; No. 1240, Bentonite Coal; No. 690, Ant Hill Coal Co. The strip pit operations include: No. 1613, B & A Coal; No. 1605, Shurheat Coal.

A fire occurred at the Red Deer Valley Coal Co. on April 4th, the fire was loaded out, seals have been erected and the old shaft filled, isolating the old workings of the mine.

One domestic permit was issued, i.e. No. 700 in the name of Richard Moreland.

57 accidents were reported to this office during the year, 4 of which occurred on the surface and 53 underground. I regret to report that 5 fatal accidents occurred in this district during the year, two of which were haulage accidents and three caused by falls of coal and rock.

A strike occurred at Mine No. 1421, Hy-Grade Mine, on June 6th and ended June 8th. This strike was due to a dispute concerning re-employment of a workman; the workman was reinstated.

The Atlas Mine, No. 1484, was on strike June 16th and June 17th in connection with a dispute concerning dates for workmen's annual holidays.

Mine No. 1493, Western Gem and Jewel Collieries Ltd., was on strike October 6th due to the dismissal of a workman; workman was reinstated.

Mine No. 1258, Brilliant Coal Co. was on strike November 1st to November 3rd due to failure of operator to post notice showing holiday due to each workman for the preceeding month, the strike ended when the notices were posted.

Mine No. 422, Commander Mine, was on strike November 1st due to haulage being docked for leaving the mine early; the dispute was successfully ironed out.

The manpower situation in this district was not as acute as in former years, the only serious complaints in this respect have come from mines on longwall and duckbill operations where the coal seams are small.

The mines in the immediate Drumheller area lost an average of 46.3 days on account of shortage of orders.

Fire destroyed the surface hay storage barn at Mine No. 367, Midland Coal Co. Ltd.

Fire destroyed the boiler house, washhouse and hoist room at Mine No. 384, Inland Coal Co. Ltd.

Mine No. 402, Red Deer Valley Coal Co.: the old headframe at the hoisting shaft has been dismantled and removed, there is only one boiler in use providing heat for the buildings and hot water to the washhouse. A Gullick Hydraulic Coal Burster has been temporarily installed in the mine, this installation together with cardox is being used experimentally, the purpose being to reduce the quantity of small coal being produced. All mines of the Drumheller area have experienced at times during the year, difficulty in disposing of nut and stoker sized coal.

The following is a list of improvements and installations at the various mines in this district during the year:

At Mine No. 346, Rosedale Collieries Ltd.: one 30 ft. x 36 ft. frame central heating plant, complete with boiler and mechanical stoker.

At Mine No. 367, Midland Coal Co. Ltd.: four approved G 20 Goodman 20 H.P. duckbill units.

At Mine No. 384, Inland Coal Co.: one 50 H.P. hoisting motor, frame washhouse (26 ft. x 30 ft.) and combined hoist room and blacksmith shop 18 ft. x 30 ft.

At Mine No. 402, Red Deer Valley Coal Co. Ltd.: two approved G20 Goodman duckbill units; two approved 7B Sullivan undercutters; one approved "Little Giant" coal drill; two approved "Victor Coal Drills" and gate end boxes; one 80 H.P. slope hoist; one 4 ft. x 10 ft. Niagara screen and one 25 ft. x 4 ft. lump coal picking belt.

At Mine No. 422, Commander Mine: one 75 K.V.A. Pyranol transformer and one 3 H.P. rail straightening machine.

At Mine No. 436, Star Mine: one 5 ton Morgan Gardner trolley locomotive; one CE7 Sullivan shearing machine.

At Mine No. 620, Newcastle Collieries Ltd.: two approved Goodman 20 H.P. duckbill units; two approved 7B Sullivan undercutters; one approved "Little Giant" coal drill.

At Mine No. 710, East Trochu Coal Co.: one 1 H.P. blower fan and one 20 gallon capacity Smart Turner centrifugal pump.

At Mine No. 728, Maple Leaf Coal Co.: two 10 H.P. B86 Westinghouse conveyor drives complete with conveyors; one 15 H.P. G15 Westinghouse conveyor drive complete with conveyor; one 20 H.P. Mavor and Coulson conveyor drive complete with conveyor; 3 approved Chicago Pneumatic coal drills; two 3½ H.P. HGF Goodman tugger hoists; one 4½ ton "Titan A Mancha" battery locomotive; one Hertner M.G. charging set; 60 model P3 Edison electric cap lamps.

At Mine No. 921, Meadow Bank Mine: one ½ H.P. Leyland electric motor and small blower fan; one ½ H.P. General Electric motor and small pump.

At Mine No. 1299, Empire Mine: four G12½-B86 Goodman duckbill units.

At Mine No. 1421, Hy-Grade Mine: one approved "Little Giant" coal drill; one approved 7½ H.P. Westinghouse replacement pump motor; a 24 ft. x 30 ft. addition to the washhouse with interior remodeled.

At Mine No. 1432, Sheerness Coal Co.: tipple improvements have been made to handle an increase in output to 200 tons daily.

At Mine No. 1484, Atlas Mine: one 4½ ton Atlas battery locomotive.

At Mine No. 1491, Murray Collieries Ltd.: dismantled and moved belt conveyor leading from mine entrance to tipple; changed the location of same to the opposite side of coulee, 300 yards distance from mine portal (this is an entirely new wood structure).

At Mine No. 1493, Western Gem and Jewel Collieries Ltd.: two GS20-B77 Goodman conveyor unit complete with 300 ft. of pans; one approved "Little Giant" coal drill.

At Mine No. 1570, Wayne Coal Co.: one Sullivan Arc-Wall C.L.U. cutting machine.

At Mine No. 1573, Monarch Coal Mining Co. Ltd.: one approved 5 H.P. Brown Fayic tugger hoist; one approved G20-B77 duckbill unit; one approved Chicago Pneumatic Coal drill; one garage 18 ft. x 26 ft.; two 100 ton capacity coal bins and the original bin increased in size for 80 ton capacity to 120 tons; 3 continuous dump units protected by snow sheds; one 20 ft. x 40 ft. Quonset Hut warehouse; one 130 ft. Steven Adams conveyor for nut and stoker coal; two dwelling houses, 26 ft. x 30 ft. (5 rooms); three dwelling houses, 24 ft. x 26 ft. (4 rooms); 20 model P3 Edison cap lamps.

At Mine No. 1599, Burnbrite Mine: one 10 ton Fairbanks scale.

At Mine No. 1655, Cozy Coal: one 10 ton Fairbanks scale.

At Mine No. 1669, Joy Coal Co.: one Cincinnati power drill; one CE7 Sullivan undercutter.

At Mine No. 1700, Twin Hills Exploration Co.: one 20 ton Fairbanks scale.

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## ELECTRICAL INSPECTION OF MINES

(B. TAIT, *Electrical Inspector of Mines*)

During 1949 there were 92 mines in the Province using electrical equipment. In addition to these, six small mines have electric cap lamps, battery charging apparatus, or electric signals. Electric shot-firing apparatus is used in all mines where blasting operations are carried on.

Twelve Provisional Mine Electricians' Certificates were issued during the year, mostly to small mines.

All mines using electrical equipment have been inspected during the year. 115 complete inspections and 5 partial inspections were made; this in addition to attending to correspondence dealing with electrical matters pertaining to mines.

Two accidents (burns), caused by the use of electricity, were reported during the year, neither of a very serious nature.

Major electrical installations in and about mines during 1949 are as follows:

No. 8 Mine, Lethbridge Collieries Ltd.: one new 24 BB Clarkson mobile face loader, 50 H.P.; one Cowlishaw-Walker 20" chain conveyor with 25 H.P. motor.

McLeod River Hard Coal Co. (1941) Ltd.: one 10 ton Jeffrey trolley locomotive installed on the 4th Level, D.C. supply for this haulage from Hewittic rectifier station.

Lusear Coals Ltd.: a new briquette plant with motors totalling 310 H.P.; all switches and controls mounted on one switchboard segregated from the other equipment.

Bighorn and Saunders Creek Collieries Ltd.: The Calgary Power Ltd. lines have been extended from Alexo to Saunders to supply the mine. The power house switchboard has been completely rebuilt.

The Canmore Mines Ltd.: trolley locomotive haulage has been installed to No. 3 Mine from the tipple, a distance of approximately four miles, the locomotive being a 15 ton General Electric; at No. 3 Mine a Calgary Power sub has been installed and also a main switchboard in the compressor room to control all out-going circuits; motors up to 590 H.P. have been installed on the surface at this mine.

Kananaskis Exploration & Development Co. Ltd.: new tipple and briquette plant with motors totalling 303 H.P.; underground: 2 Goodman coal cutting machines and 5 shaker conveyors.

There have been numerous smaller installations during 1949. In addition to the construction of power lines, transformer subs, lighting, heating, etc., the horse power of motors installed in and about mines in 1949 totals approximately 5,100 H.P.

At December 31st, 1949, the total H.P. of motors in use at mines is as follows: above ground 42,474 H.P.; underground 19,189 H.P.; total above and below ground: 61,663 H.P.

The figures below show the trend in the use of certain types of electrical equipment underground in mines:

	1945	1946	1947	1948	1949
Coal cutting machines.....	147	155	166	184	184
Battery locomotives.....	32	37	39	39	41
Trolley locomotives.....	15	16	19	22	23
Conveyors.....	23	27	38	47	74
Coal drills.....	31	40	52	59	79
Mobile face loaders.....	---	---	1	6	7

The majority of electrified mines are supplied with power from central stations. In addition, local steam plants with a capacity of 9,630 K.V.A. and diesel and gasoline powered plants with a capacity of approximately 840 K.V.A. are in use.

The standard of maintenance of the electrical installations at mines has been quite satisfactory during the year and good co-operation has been received from the management and electricians.

## THE MINES DIVISION

## ANNUAL PRODUCTION OF COAL FROM MINES IN THE PROVINCE OF ALBERTA

The following table is taken from a report prepared by the Dominion Bureau of Statistics and published in "Coal Statistics for Canada" for the year 1948:

Calendar Year	Short Tons	Value
1886	43,220	\$ 81,112
1887	74,152	157,577
1888	115,124	183,354
1889	97,364	179,640
1890	128,753	198,298
1891	174,131	437,243
1892	178,970	460,605
1893	230,070	586,260
1894	184,940	473,827
1895	169,885	382,526
1896	209,162	581,832
1897	242,163	630,408
1898	315,088	787,720
1899	309,600	774,000
1900	311,450	778,625
1901	340,275	850,687
1902	402,819	960,605
1903	495,893	1,117,541
1904	661,732	1,404,524
1905	931,917	1,993,915
1906	1,246,360	2,614,762
1907	1,591,579	3,836,286
1908	1,685,661	4,127,311
1909	1,994,741	4,838,109
1910	2,894,469	7,065,736
1911	1,511,036	3,979,264
1912	3,240,577	8,113,525
1913	4,014,755	10,418,941
1914	3,683,015	9,350,392
1915	3,360,818	8,283,079
1916	4,559,054	11,386,577
1917	4,736,368	14,153,685
1918	5,972,816	20,537,287
1919	4,933,660	18,205,205
1920	6,907,765	30,186,933
1921	5,909,217	27,246,514
1922	5,990,911	24,351,913
1923	6,854,397	28,018,303
1924	5,189,729	18,884,318
1925	5,869,031	20,021,484
1926	6,503,705	20,886,103
1927	6,934,162	21,982,058
1928	7,336,330	23,532,414
1929	7,150,693	22,928,182
1930	5,755,528	18,063,225
1931	4,564,015	13,342,675
1932	4,870,648	13,526,309
1933	4,718,788	12,307,258
1934	4,753,810	12,556,099
1935	5,462,894	14,094,795
1936	5,696,960	14,659,705
1937	5,562,839	14,563,911
1938	5,251,233	13,698,470
1939	5,519,208	14,415,281
1940	6,203,839	16,377,959
1941	6,969,962	19,382,471
1942	7,754,033	22,624,410
1943	7,676,726	24,030,686
1944	7,428,708	26,814,957
1945	7,800,151	27,751,377
1946	8,826,311	33,441,930
1947	8,070,430	36,439,095
1948	8,123,255	42,217,449
Total	236,696,915	\$768,276,738

Production quantities and values prior to 1919 refer to sales and colliery consumption. From 1919 to 1948 the mine output figures are given.

**ESTIMATED ALBERTA COAL RESERVES**  
As at February, 1945

Name of Area	Total Area sq. mi.	Area underlain by Coal sq. mi.	Thickness of coal feet	Tons per acre foot	Tonnage, millions of tons	Totals millions of tons
<b>KOOTENAY FORMATION</b>						
Smoky River.....	1,490	55	50	1,860	3,300	
Brule.....	715	36	23	1,860	1,000	
Mountain Park.....	690	108	40	1,875	5,200	
Nordegg.....	835	46	27	1,840	1,500	
Clearwater.....	645	18	25	1,860	500	
Panther.....	410	11	25	1,860	300	
Cascade.....	870	100	32	1,880	3,900	
Highwood.....	745	90	60	1,860	6,400	
Oldman.....	515	72	30	1,800	2,500	
Crowsnest.....	840	140	30	1,900	5,100	29,700
<b>BELLY RIVER (including Edmonton)</b>						
Halcourt.....	970	72	3	1,800	300	
Prairie Creek.....	565	25	15	1,820	400	
Coalspur.....	1,125	100	30	1,900	3,600	
Saunders.....	745	72	20	1,840	1,700	
Morley.....	1,480	80	10	1,800	900	
Pekisko.....	945	75	15	1,820	1,300	
Pincher.....	955	36	7	1,860	300	
Sexsmith.....	1,570	2	5	1,800	10	
Valhalla.....	1,765	5	5	1,800	30	
Red Deer.....	1,625	20	20	1,820	500	
Westlock.....	1,705	5	6	1,800	40	9,080
<b>BELLY RIVER</b>						
Magrath.....	1,550	72	6	1,870	500	
Lethbridge.....	575	150	4	1,860	700	
Milk River.....	2,735	80	6	1,850	600	
Pakowki.....	2,590	41	6	1,800	300	
Taber.....	2,770	80	3	1,860	300	
Redcliff.....	2,015	1	4	1,780	5	
Brooks.....	2,270	30	4	1,780	100	
Steveville.....	2,015	3	3	1,780	10	
Empress.....	2,015	1	3	1,780	3	
Wainwright.....	1,080	2	5	1,780	10	
Pakan.....	3,025	2	5	1,780	10	
Rochester.....	1,150	1	6	1,800	7	
Slave.....	2,375	2	4	1,800	9	
High Prairie.....	3,020	2	4	1,800	9	2,563
<b>EDMONTON FORMATION</b>						
Pembina.....	2,630	50	25	1,870	1,500	
Edmonton.....	2,270	50	12	1,790	700	
Tofield.....	900	20	15	1,760	300	
Camrose.....	865	10	10	1,760	100	
Castor.....	2,880	20	15	1,770	300	
Ardley.....	720	20	10	1,820	200	
Big Valley.....	540	7	6	1,860	50	
Carbon.....	1,190	25	10	1,850	300	
Sheerness.....	1,765	20	10	1,800	200	
Drumheller.....	430	75	15	1,820	1,300	
Gleichen.....	2,125	10	5	1,780	60	
Champion.....	1,620	10	5	1,850	60	
Wetaskiwin.....	1,730	10	6	1,780	70	
Whitecourt.....	1,440	10	6	1,850	70	
Mountain House.....	940	2	4	1,800	9	5,219
<b>Grand Total.....</b>	<b>72,435</b>	<b>1,974</b>	....	....	....	<b>46,562</b>

Extract of Pages D-3 and D-4 of the Alberta Submission to the Royal Commission on the Coal Industry of Canada.

## THE MINES DIVISION

THE ANNUAL CONSUMPTION OF COAL IN CANADA 1902-1948

The following revised table is taken from the report issued by the Dominion Bureau of Statistics for the year 1948

Year	Canadians*		Imported coal "entered for consumption"			Total	Per Capita
	Short tons	%	From U.S.A.	From Great Britain	Total		
	Short tons	Short tons	Short tons	Short tons	%	Short tons	
1902	5,376,413	33.1	4,656,286	101,726	4,734,559	46.9	10,110,972
1903	6,005,735	47.3	6,520,931	184,593	6,678,450	52.1	12,684,185
1904	6,697,183	47.9	7,238,869	85,687	7,397,482	52.1	13,994,665
1905	7,032,661	49.4	7,233,788	68,500	7,254,446	50.6	14,791,107
1906	7,927,560	50.5	7,787,338	67,014	7,758,325	49.5	15,685,885
1907	8,617,352	45.0	10,588,697	54,325	10,349,503	55.0	19,166,855
1908	8,156,478	47.3	10,203,352	97,514	10,195,424	52.7	19,351,190
1909	8,913,376	47.9	9,805,253	67,671	9,711,826	52.1	18,625,202
1910	10,532,103	50.2	10,545,451	51,541	10,437,123	49.8	20,970,226
1911	9,822,749	40.5	14,510,129	48,963	14,424,949	59.5	24,247,698
1912	12,385,696	46.0	14,557,124	38,668	14,549,104	54.0	26,934,800
1913	13,430,158	42.6	18,145,769	37,825	18,132,387	47.4	31,582,545
1914	12,214,403	45.5	14,687,783	33,101	14,637,920	54.5	26,852,323
1915	11,500,480	48.1	12,450,786	15,098	12,406,692	51.9	23,906,692
1916	12,318,036	41.3	17,576,202	4,401	17,517,820	58.7	29,865,856
1917	12,313,603	37.2	20,848,009	9,451	20,810,132	62.8	33,123,735
1918	13,160,731	37.8	21,674,826	3,761	21,611,101	62.2	34,771,822
1919	11,611,168	40.3	17,292,913	3,344	17,236,269	59.7	28,847,437
1920	14,025,566	42.9	18,752,981	1,591	18,868,741	57.1	32,694,307
1921	12,715,734	41.1	18,300,084	765,980	18,258,387	58.9	30,974,121
1922	13,044,352	50.2	12,956,555	12,962,189	12,962,189	54.1	30,974,121
1923	15,070,962	41.8	20,417,239	572,570	20,967,971	58.2	36,038,933
1924	12,529,358	42.8	16,405,344	317,112	16,714,143	57.2	29,243,501
1925	12,125,290	42.6	15,744,957	604,117	15,331,971	57.4	28,457,261
1926	15,086,296	47.7	16,204,405	287,299	16,365,555	52.3	31,651,851
1927	15,944,983	46.7	17,266,434	907,220	18,177,303	53.3	31,122,286
1928	16,487,807	50.0	15,830,688	682,755	16,515,582	50.0	33,003,389
1929	16,337,461	48.0	16,780,432	843,502	17,724,132	52.0	34,111,583
1930	14,632,671	43.3	16,971,933	1,144,861	18,420,039	56.7	32,464,710
1931	11,682,779	47.7	11,793,788	987,442	12,828,327	52.3	24,511,106
1932	11,212,701	49.9	9,889,866	1,727,716	11,651,492	51.0	28,867,193
1933	11,456,273	51.5	8,865,935	1,942,875	10,808,962	48.5	22,265,235
1934	13,236,406	51.1	10,580,710	1,981,116	12,051,168	48.9	25,887,574
1935	13,306,303	53.1	9,618,518	1,822,500	11,735,835	46.9	22,992,138
1936	14,508,303	53.3	10,801,613	1,498,656	12,719,515	46.7	27,228,167
1937	15,172,729	51.5	12,754,574	1,211,052	12,268,585	48.5	25,441,314
1938	13,800,094	53.5	10,754,747	1,257,887	12,012,634	46.5	25,812,728
1939	14,902,915	50.7	12,838,347	1,099,419	14,479,668	49.3	23,382,585
1940	16,666,234	49.5	15,309,778	1,514,458	17,036,090	50.5	33,702,324

1941	17,227,151	46.2	19,332,479	693,902	20,026,082	53.8	37,253,233
1942	17,725,761	42.4	23,755,334	388,010	24,122,916	57.6	41,848,677
1943	16,321,006	37.1	27,393,778	301,475	27,893,098	62.9	44,016,104
1944	15,660,808	35.7	27,948,008	218,511	28,169,201	64.3	43,827,009
1945	15,227,819	38.3	24,505,241	28,388	24,521,528	61.7	39,739,347
1946	16,502,08	39.0	25,639,541	101,580	27,740,704	61.0	42,243,212
1947	14,673,967	34.0	28,410,149	52,777	28,462,942	66.0	43,156,209
1948	16,928,028	36.0	30,295,841	162,550	30,454,917	64.0	47,382,945
							3,678

\*The sum of Canadian coal mine sales, colliery consumption, coal supplied to employees and coal used in making coke, etc., less the tonnage of coal exported.

†Includes small tonnages from Countries other than Great Britain and the United States. Deductions have been made to take account of foreign coal re-exported from Canada, and bituminous coal ex-warehouse for ship's store.  
Imports of coal and coke briquettes not included.

## THE MINES DIVISION

The following table shows the quantity of coke imported into Canada during the years 1947, 1948 and 1949 through ports in the Provinces, compiled from information from the Dominion Bureau of Statistics:

Province of:	1947		1948		1949	
	Made from Petroleum	Made from Coal	Made from Petroleum	Made from Coal	Made from Petroleum	Made from Coal
Nova Scotia.....						
Quebec.....	194,222	13,405	2,804	1,589	1,484	4,346
Ontario.....	61,557	18,057	292,391	530,694	278,345	421,773
Manitoba.....		500,272	534	17,249	.....	14,594
Saskatchewan.....		27,821	.....	477	.....	1,178
British Columbia.....		.....	2,923	1,701	.....	2,474
Alberta.....	3,734	.....	626	133	.....	212
Prince Edward Island.....	.....	502	.....	.....	.....	.....
Total.....	259,613	563,305	296,355	561,903	279,829	444,577

## ANNUAL REPORT, 1949

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Imports of Coal for each year since 1919, through ports in the Province of Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and Yukon  
BITUMINOUS COAL

Year	Central Ontario	Port Arthur	Port Frances	Fort William	Total Ontario	Manitoba	Saskatch'wan	Alberta	B.C. & Yukon	Total Canada
1919	7,641,682	483,911	59,253	1,063,793	9,248,719	62,746	1,406	1,131	6,700	12,010,490
1920	10,261,237	571,879	111,957	1,391,709	12,336,903	43,547	535	607	13,128	15,902,632
	8,605,872	659,763	127,956	1,316,155	10,709,746	76,833	1,217	1,081	13,536,250	
1921	445,019	7424,171	68,082	1,517,250	9,434,522	74,848	1,484	1,147	13,966	11,563,487
1922	11,621,839	95,439	1,731,667	14,068,002	112,134	1,607	1,110	1,7919	17,517,108	
1923	619,037	8,763,676	70,259	1,500,525	143,609	2,422	1,209	25,049	12,619,082	
1924	403,388	286,984	81,173	497,264	9,884,710	147,758	1,732	1,175	40,286	13,015,323
1925	9,100,462	199,905	199,908	83,182	965,105	11,660,108	149,374	1,887	1,515	32,992
1926	11,572,678	221,694	90,864	1,273,691	13,158,927	142,860	2,141	1,324	22,648	15,178,640
1927	10,539,408	194,718	103,594	1,481,228	12,338,948	97,002	2,536	1,360	18,682	13,966,183
1928	11,232,037	143,789	100,141	1,591,636	13,067,713	24,898	2,477	1,327	18,526	14,583,275
1929	10,421,748	165,499	70,403	1,297,939	11,935,727	28,801	1,816	1,351	8,886	13,345,308
1930	8,831	8,667,736	65,738	609,279	9,315,563	7,041	1,535	912	2,308	10,347,280
1931	6,867,307	62,019	48,195	69,181	7,630,072	12,298	1,459	830	3,582	8,532,318
1932	7,038,386	74,934	30,108	482,206	7,653,634	13,213	1,327	998	26,077	8,427,636
1933	8,472,143	126,671	37,083	602,510	9,238,409	12,103	1,235	1,302	2,301	8,268,945
1934	8,032,739	6,033	53,145	591,810	8,638,727	9,918	952	1,136	3,722a	9,549,437b
1935	9,946,567	156,229	67,784	688,950	9,301,758	14,101	847	1,205	3,524d	10,200,233e
1936	11,937	113,746	128,595	69,598	10,964,920	12,079	743	1,293	2,540g	12,241,270h
1937	7,981,712	56,806	698,371	8,800,635	9,061	783	1,116	2,701k	9,567,334i	
1938	8,035,174	53,772	528,887	8,693,365	15,035	862	990	1,808	9,903,613o	
1939	11,312,806	28,363	30,138	503,732	11,875,089	7,066	692	795	2,591	13,578,705x
1940	13,910,140	29,608	26,523	1,212,815	14,731,647	10,021	671	1,062	1,646	17,867,068
1941	14,397,298	292,783	51,942	1,425,150	15,934,838	21,568	773	1,573	20,807,005	
1942	15,524,762	152,955	262,893	18,365,760	90,293	732	1,002	1,611	24,393,758	
1943	15,654,562	271,617	364,674	2,195,070	18,485,923	556	935	1,236	24,513,527	
1944	14,236,472	262,266	290,856	1,320,728	16,110,322	20,397	642	1,221	1,682	21,176,811xx
1945	331,674	322,295	1,946,218	16,872,365	686	1,038	1,790	22,000,398xxxx		
1946	16,827,356	340,450	1,972,434	19,556,887	560	806	1,866	25,841,440xxxx		
1947	17,774,268	3,142,251*	1,926,647	20,916,519	485	.....	29,686	25,907,103xxxx		
1948	11,848,120	1,385,640*	.....	13,233,760	4,609	6,114	124	15,799,509		

xConsists of 13,382,389 tons from the United States and 196,316 tons from Great Britain.

xxConsists of 21,176,805 tons from the United States and 6 tons from Great Britain.

xxxConsists of 22,000,314 tons imported from the United States and 84 tons from Great Britain.

xxxxConsists of 25,839,917 tons imported from the United States, 1,087 tons imported from Great Britain, 431 tons from Belgium and 5 tons from Alaska.

xxxxxIncludes briquettes and lignite coal. \*Includes Fort Frances and Fort William

ANTHRACITE COAL

1919	2,977,913	119,234	559	3,444,148	12,906	66	136	4,972,283
1920	69,206	2,618	226,476	3,241,461	17,509	517	75	4,915,964
1921	2,943,134	138	198,108	3,070,217	23,473	66	551	4,567,370
1922	2,800,189	12	30,018	1,644,461	14,715	231	.....	2,693,957
1923	5,580,924	429	54,329	3,144,766	55,876	2,291	174	5,167,881
1924	3,061,779	28,229	59	2,689,003	34,222	1,720	.....	687
1925	5,599,688	4,775	237	84,513	2,254,040	34,396	30	4,183,594
1926	2,203,281	37	170	50,731	2,319,494	17,990	.....	3,798,744
1927	2,458,674	56	60,810	51	2,202,849	15,885	464	5,202
1928	1,123,515	.....	51	57,494	2,236,558	10,130	484	2,412,932
1929	2,179,022	42	303	52,369	2,299,087	9,180	579	3,812
1930	2,446,063	352	224	45,241	2,125,922	8,323	365	2,741,619
1931	2,080,457	.....	18,302	1,633,945	3,695	367	1,123	2,456,090
1932	1,615,643	3	12,677	1,263,435	3,800	.....	33	1,178,141
1933	1,240,755	8	8,742	1,137,792	5,669	3	702	3,138,157
1934	1,129,041	3,030	7,934	1,385,784	6,086	75	3,657	3,035,613
1935	1,374,881	19	9,455	1,379,593	5,852	.....	592	3,573,309
1936	1,370,119	135	16,350	1,453,098	5,884	40	1,600	3,451,318 <sup>c</sup>
1937	1,436,613	8	21,052	1,629,713	5,639	58	1,151	3,530,040 <sup>b</sup>
1938	1,608,553	69	16,050	1,713,720	4,674	34	.....	3,572,268
1939	1,637,601	297	10,431,142	2,061,898	4,696	39	280	3,714,001 <sup>lm</sup>
1940	1,043,156	2,033,585	18,459	2,044,156	4,466	.....	333	3,977,805 <sup>p</sup>
1941	1,370,119	10,571	15,071	2,362,433	10,021	16	236	3,964,862 <sup>q</sup>
1942	2,313,406	.....	.....	2,816,165	7,093	.....	30	3,940,859 <sup>r</sup>
1943	2,807,479	.....	.....	2,513,199	16,336	23	.....	4,802,023
1944	2,152,024	.....	.....	2,513,199	16,336	23	110	4,458,519 <sup>s</sup>
1945	2,528,190	42	2,932	2,535,976	9,723	4	62	4,413,227
1946	2,008,208	513	13,394	2,010,182	6,198	1	1	3,411,424 <sup>t</sup>
1947	2,776,497	1,831	9,825	2,792,381	11,718	.....	.....	4,639,347,7x
1948	2,912,629	56,708*	.....	2,924,411	10,497	11	51	4,142,529xxxx
1949	3,287,858	53,753*	.....	3,344,566	3,197	.....	2,116	5,142,116
	2,414,784	.....	.....	2,468,537	1,935	.....	4,080,147	.....
						302		

Consists of 3,383,042 tons imported from the United States and 28,382 from Great Britain.

Consists of 4,537,852 tons from the United States and 101,496 from Great Britain.

Consists of 4,412,285 tons imported from the United States and 51,722 from Great Britain.

Consists of 4,966,775 tons imported from the United States and 175,754 from Great Britain.

includes Fort Frances and Fort William.

- (a) Includes imports into the Yukon Territory of 10 tons in July and 10 in October.
- (b) Consists of 9,168,428 tons imported from the United States, 380,645 tons from Great Britain, 43 tons from Alaska, 285 tons imported from Norway, 55 tons from Estonia and 1 ton from Poland.
- (c) Consists of 1,670,085 tons from United States, 1,454,521 tons from Great Britain, 205,045 tons from Germany, 67,220 tons from Belgium and 54,447 tons from French Indo-China.
- (d) Includes imports into the Yukon Territory of 4 tons in April, 3 tons in May, 6 in June, 45 in July, 2 in October.
- (e) Consists of 10,042,127 tons imported from the United States, 149,905 tons from Great Britain, 9,421 tons from Germany, 361 tons from Norway, 124 tons from Denmark, 45 tons from Sweden, 35 tons from the Netherlands, 134 tons from Estonia and 286 tons from Newfoundland.
- (f) Consists of 1,685,848 tons imported from the United States, 1,331,279 tons from Great Britain, 359,994 tons from Germany, 33,543 tons from Belgium, 122,572 tons from French Indo-China, 16,231 tons from the Netherlands and 1,120 tons from China.
- (g) Includes imports into the Yukon Territory of 4 tons in March, 6 tons in June, 45 tons in July and 2 tons in October.
- (h) Consists of 12,333,378 tons imported from the United States, 56,073 tons from Great Britain, 54,061 tons from Germany, 113 tons from Norway, and 200 tons from Estonia.
- (i) Consists of 2,003,317 tons imported from United States, 1,134,855 tons from Great Britain, 2,582,57 tons from Germany, 8,131 tons from Belgium, 154,495 tons from Russia and 78 tons from Morocco.
- (k) Includes imports into the Yukon Territory of 8 tons in March, 10 tons in July and 8 tons in October.
- (l) Consists of 9,644,020 tons imported from the United States, 1,199,131 tons from Great Britain, 407,031 from Germany, and 417 tons from Japan.
- (m) Consists of 1,973,610 tons from the United States, 1,199,131 tons from Great Britain, 407,031 tons from Germany, 34,182 tons from Belgium, 14,952 tons from Russia and 19,645 from Morocco, 37,594 tons from the Netherlands and 30,302 tons from French Indo-China.
- (n) Includes imports into the Yukon Territory of 15 tons in July and 8 in December.
- (o) Consists of 9,886,110 tons imported from the United States, 67,483 tons from Great Britain and 20 tons from Norway.
- (p) Consists of 2,605,765 tons from the United States, 1,034,901 tons from Great Britain, 293,602 tons from Germany and 43,537 tons from French Indo-China.
- (q) Consists of 2,643,588 tons from the United States and 1,321,274 tons from Great Britain.

## THE MINES DIVISION

Imports of Coal into Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Yukon and Canada, by months during 1949:

## BITUMINOUS COAL

Month	Central Ontario	Head of Lakes	Total Ontario	Manitoba	Saskatchewan	Alberta	B.C. & Yukon	Total	Total Canada
January.....	379,232	20,900	400,132	7,681	.....	.....	1,906	9,587	579,619
February.....	335,317	20,252	355,609	6,588	.....	.....	1,919	8,502	563,704
March.....	30,307	33,550	340,857	1,542	.....	.....	1,488	3,030	477,602
April.....	1,444,018	130,019	1,574,037	379	.....	.....	113	492	1,746,193
May.....	2,296,129	215,129	2,511,258	474	.....	.....	173	647	2,636,681
June.....	1,982,157	276,995	2,259,152	663	.....	.....	151	814	2,646,291
July.....	937,640	111,684	1,049,324	756	.....	.....	127	883	1,292,785
August.....	1,301,155	179,024	1,480,179	2,374	.....	.....	.....	2,374	1,732,389
September.....	1,021,248	160,757	1,182,005	7,146	.....	.....	41	7,187	1,372,606
October.....	184,637	52,859	237,496	6,503	.....	.....	124	6,627	289,692
November.....	708,646	114,707	823,353	7,833	.....	.....	39	7,874	953,582
December.....	950,534	69,764	1,020,358	3,673	.....	.....	157	3,830	1,208,365
Total.....	11,848,120	1,385,640	13,233,760	45,609	.....	.....	124	6,114	15,799,509

## ANTHRACITE COAL

January.....	192,008	1,084	193,092	197	13	.....	.....	210	272,600
February.....	157,882	6,290	164,182	298	84	.....	.....	382	246,765
March.....	121,806	1,028	122,834	58	.....	.....	.....	38	180,562
April.....	182,915	.590	183,505	7	40	.....	.....	47	249,279
May.....	241,429	3,886	245,315	42	79	.....	.....	121	405,460
June.....	182,249	19,561	201,810	.....	.....	.....	.....	.....	357,899
July.....	184,485	2,928	185,413	46	.....	.....	.....	46	358,297
August.....	191,332	2,979	194,511	226	.....	.....	.....	312	362,520
September.....	207,381	3,040	210,421	338	.....	.....	.....	338	385,022
October.....	246,237	2,875	249,112	248	.....	.....	.....	248	45,639
November.....	307,259	9,244	316,523	162	.....	.....	.....	162	504,163
December.....	199,571	2,248	201,819	313	.....	.....	.....	313	301,941
Total.....	2,414,784	53,773	2,468,537	1,935	302	.....	.....	2,237	4,080,147

## GRAND TOTAL IMPORTATIONS

Bituminous.....	11,848,120	1,385,640	13,233,760	45,609	124	6,114	51,847	51,847	15,799,509
Anthracite.....	2,414,784	53,773	2,468,537	1,935	302	.....	.....	2,237	4,080,147
Total.....	14,262,904	1,439,393	15,702,297	47,544	302	124	6,114	54,084	19,879,656

## MINERAL PRODUCTION IN ALBERTA DURING 1947 and 1948

Prepared in the Mining, Metallurgical and Chemical Branch, Ottawa, Canada

	1947		1948	
	Quantity	Value	Quantity	Value
<b>METALLICS:</b>				
Gold, fine ounces.....	78	2,730	78	2,730
Silver, fine ounces.....	16	12	7	5
<b>NON-METALLICS:</b>				
Coal, short tons.....	8,070,430	36,439,095	8,123,255	42,217,449
Natural gas, M. cu. ft.....	44,106,643	7,745,886	48,965,217	8,324,087
Peat moss, tons.....				
Petroleum, crude barrels.....	6,770,477	18,078,907	10,888,592	35,127,751
Salt, tons.....	29,698	438,825	34,613	449,780
Sodium Sulphate, tons.....				
<b>CLAY PRODUCTS &amp; OTHER STRUCTURAL MATERIALS:</b>				
Cement, barrels.....	737,551	1,491,510	1,224,313	2,521,978
Clay products.....		1,771,250		2,055,738
Lime:				
Quicklime, tons.....	23,789	216,069	23,437	225,430
Hydrated, tons.....	1,944	19,940	934	9,340
Sand and gravel, tons.....	2,058,142	1,170,883	3,592,275	2,219,497
Stone, tons.....	13,883	57,600	14,298	57,444
Total.....		67,432,707		93,211,229

## THE MINES DIVISION

PARTICULARS WITH REFERENCE TO THE COAL MINING INDUSTRY IN THE  
 PROVINCE OF ALBERTA DURING THE YEAR ENDING DECEMBER 31, 1949  
 SUMMARY OF STATISTICS

Tonnage stripped by farmers under domestic permits.....	17
Number of short tons of coal produced.....	8,616,983
Number of short tons of briquettes made.....	460,643
Number of short tons of coke produced.....	54,922
Number of short tons of shale produced.....	94,729
Number of coal mines in operation during the year.....	205
Number of mines opened during the year.....	21
Number of mines re-opened during the year.....	51
Number of mines closed during the year.....	60
Number of mines abandoned during the year.....	29
Number of shale pits in operation during the year.....	6
Number of mines in operation at December 31st, 1949.....	180
61 mines or 29.76% of the total operating produced.....	0.30% of the output
58 mines or 28.29% of the total operating produced.....	1.54% of the output
18 mines or 8.78% of the total operating produced.....	1.51% of the output
28 mines or 13.66% of the total operating produced.....	7.91% of the output
12 mines or 5.86% of the total operating produced.....	9.87% of the output
9 mines or 4.39% of the total operating produced.....	12.30% of the output
8 mines or 3.90% of the total operating produced.....	16.15% of the output
3 mines or 1.46% of the total operating produced.....	9.27% of the output
8 mines or 3.90% of the total operating produced.....	41.15% of the output
Average number of persons employed below ground.....	5,533
Average number of persons employed above ground.....	2,087
Average number of persons employed at strip mining.....	1,062
Number of separate accidents causing loss of life.....	12
Number of deaths caused by accidents above ground.....	2
Number of deaths caused by accidents below ground.....	11
Number of serious accidents above ground.....	12
Number of serious accidents below ground.....	77
Number of slight accidents above ground.....	16
Number of slight accidents below ground.....	92
Total purchased electric power (kilowatt hours).....	53,590,982
Number of prosecutions instituted.....	31
Number of Provisional Overmen's Certificates issued during 1949.....	74
Number of Provisional Examiners' Certificates issued during 1949.....	5
Number of Provisional Electricians' Certificates issued during 1949.....	12
Number of Provisional Foremen's Certificates issued during 1949.....	51
Number of Provisional Blasters' Certificates issued during 1949.....	18
Number of Provisional Miners' Certificates issued during 1949.....	139
Number of Miners' Permits issued during 1949.....	732
Number of Miners' Certificates issued during 1949.....	441
Number of Miners' Duplicate Certificates issued during 1949.....	40
Number of First Class Certificates issued during 1949.....	4
Number of Second Class Certificates issued during 1949.....	11
Number of Third Class Certificates issued during 1949.....	38
Number of Mine Surveyors' Certificates issued during 1949.....	4
Number of First Class Mine Electricians' Certificates issued during 1949.....	6
Number of Second Class Mine Electricians' Certificates issued during 1949.....	3
Number of Strip Mine Managers' Certificates issued during 1949.....	40
Number of Foremen's Certificates issued during 1949.....	41
Number of Blasters' Certificates issued during 1949.....	10
Number of First Class Certificates issued up to December 31st, 1949.....	295
Number of Second Class Certificates issued up to December 31st, 1949.....	600
Number of Third Class Certificates issued up to December 31st, 1949.....	1,758
Number of Mine Surveyors' Certificates issued up to December 31st, 1949.....	220
Number of First Class Mine Electricians' Certificates issued up to December 31st, 1949.....	142
Number of Second Class Mine Electricians' Certificates issued up to December 31st, 1949.....	18
Number of Strip Mine Managers' Certificates issued up to December 31st, 1949.....	117
Number of Foremen's Certificates issued up to December 31st, 1949.....	114
Number of Blasters' Certificates issued up to December 31st, 1949.....	37
Number of Miners' Certificates issued up to December 31st, 1949.....	19,505

**PARTICULARS OF WORK DONE BY FARMERS STRIPPING COAL UNDER  
DOMESTIC PERMITS**

Tonage.....	17
Number of days worked during the year.....	16
Number of men employed.....	4
Total number of shifts worked.....	10
Total number of permits issued.....	.....
Permits issued in 1948 and used in 1949.....	4

The above coal was stripped for domestic use only, and not for sale.

**PARTICULARS OF WORK DONE IN SHALE MINES IN THE PROVINCE  
DURING 1949**

Output of shale (in tons) used making bricks.....	73,703
Output of shale (in tons) used making hollow tile.....	21,026
Number of shifts worked.....	63,124
Number of men employed.....	232
Explosives used (pounds).....	14,500
Number of shots fired.....	2,729
Total number of bricks made.....	27,482,398
Total number of bricks put to stock.....	1,525,651
Total number of bricks lifted from stock.....	607,000
Bricks sold for use in: Alberta.....	15,096,390
Saskatchewan.....	4,553,198
British Columbia.....	3,656,131
Manitoba.....	3,050,099
Ontario.....	120,000
Elsewhere.....	87,920
Total.....	26,563,738
Hollow tile made (tons).....	.....
Hollow tile put to stock.....	903
Hollow tile sold.....	20,123

## THE MINES DIVISION

In the following tables the short tons of 2,000 lbs. is used in all cases.

Year	Output in tons for N.W.T. (Alta. & Sask.)	Output in tons for Alberta
1901.....	346,649	.....
1902.....	510,674	.....
1903.....	622,939	.....
1904.....	782,931	.....
1905.....	.....	811,228
1906.....	.....	1,385,000
1907.....	.....	1,834,745
1908.....	.....	1,845,000
1909.....	.....	2,174,329
1910.....	.....	3,036,757
1911.....	.....	1,694,564
1912.....	.....	3,446,349
1913.....	.....	4,306,346
1914.....	.....	3,821,739
1915.....	.....	3,434,891
1916.....	.....	4,648,604
1917.....	.....	4,863,414
1918.....	.....	6,148,620
1919.....	.....	5,022,412
1920.....	.....	6,908,923
1921.....	.....	5,937,195
1922.....	.....	5,976,432
1923.....	.....	6,866,923
1924.....	.....	5,203,713
1925.....	.....	5,883,394
1926.....	.....	6,508,908
1927.....	.....	6,936,780
1928.....	.....	7,334,179
1929.....	.....	7,147,250
1930.....	.....	5,755,911
1931.....	.....	4,563,309
1932.....	.....	4,867,984
1933.....	.....	4,714,784
1934.....	.....	4,748,848
1935.....	.....	5,462,973
1936.....	.....	5,696,375
1937.....	.....	5,551,682
1938.....	.....	5,230,015
1939.....	.....	5,518,105
1940.....	.....	6,205,088
1941.....	.....	6,970,064
1942.....	.....	7,754,279
1943.....	.....	7,677,982
1944.....	.....	7,427,433
1945.....	.....	7,801,248
1946.....	.....	8,824,455
1947.....	.....	8,074,596
1948.....	.....	8,111,013
1949.....	.....	8,616,983

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**CLASSIFICATION OF OUTPUT DURING THE YEARS 1901 to 1949 INCLUSIVE**

Year	Domestic	Domestic and Bituminous	Sub-bituminous	Bituminous	Anthracite	Coal used in coke Production	Briquettes	Coke
1901	331,907	.....	.....	.....	14,742	.....	.....	.....
1902	494,087	.....	.....	16,587	.....	.....	.....	.....
1903	617,754	.....	.....	3,185	.....	.....	.....	.....
1904	759,568	.....	.....	23,363	.....	71,292	.....	46,640
1905	972,686	.....	.....	43,653	.....	103,930	.....	69,844
1906	602,780	.....	.....	235,597	.....	49,585	.....	73,782
1907	639,335	.....	.....	939,295	256,115	36,261	.....	75,657
1908	584,334	.....	.....	1,011,571	249,095	87,812	.....	87,812
1909	763,673	.....	.....	1,197,399	213,257	148,104	.....	121,578
1910	878,011	.....	.....	1,896,961	261,785	108,996	.....	35,984
1911	964,700	.....	.....	649,745	80,119	48,200	.....	105,684
1912	1,341,389	.....	.....	1,926,371	178,589	90,000	.....	105,684
1913	1,763,225	.....	.....	2,374,401	162,720	130,861	.....	65,167
1914	1,697,401	.....	.....	1,953,367	170,971	44,249	.....	29,058
1915	1,682,922	.....	.....	1,626,237	125,732	83,180	.....	23,826
1916	2,172,801	.....	.....	2,335,259	140,544	67,105	.....	41,950
1917	2,537,829	.....	.....	2,206,868	118,717	51,905	.....	31,630
1918	3,035,061	.....	.....	2,982,334	131,225	33,462	.....	32,858
1919	2,611,009	.....	.....	2,325,787	85,616	70,033	.....	101,693
1920	3,359,309	.....	.....	3,419,021	130,594	62,466	.....	62,466
1921	2,943,141	.....	.....	2,897,380	96,674	39,638	.....	173
1922	3,086,669	.....	.....	2,214,273	40,417	28,167	.....	28,167
1923	3,161,741	.....	.....	3,241,614	107	24,111	.....	24,111
1924	3,096,660	.....	.....	591,946	1,515,107	15,102	.....	15,102
1925	3,156,359	.....	.....	581,855	2,145,200	13,582	.....	2,183
1926	3,160,029	.....	.....	490,371	2,858,508	11,381	.....	49,279
1927	3,257,171	.....	.....	595,190	2,984,419	287	20,649	20,649
1928	3,378,200	.....	.....	740,498	3,215,481	24,768	.....	24,768
1929	3,385,749	.....	.....	668,108	3,003,393	21,015	.....	21,015
1930	2,874,090	.....	.....	603,331	2,278,490	97,353	.....	65,349
1931	2,245,563	.....	.....	471,389	1,846,557	99,537	.....	65,967
1932	2,576,831	.....	.....	559,479	1,738,720	103,498	.....	68,692
1933	2,454,047	.....	.....	554,141	1,726,536	48,510	.....	68,913
1934	2,295,566	.....	.....	537,542	91,745	105,926	.....	70,753
1935	2,617,912	.....	.....	566,436	2,248,625	18,812	.....	63,428
1936	2,841,231	.....	.....	566,486	2,288,658	27,044	.....	65,967
1937	2,631,150	.....	.....	506,529	2,414,003	39,239	.....	68,692
1938	2,433,263	.....	.....	488,912	2,287,850	103,191	.....	68,913
1939	2,449,199	.....	.....	512,105	2,556,801	48,510	.....	70,753
1940	2,337,016	.....	.....	598,686	3,069,197	66,127	.....	105,390
1941	2,713,254	.....	.....	583,453	3,671,357	126,188	.....	70,354
1942	3,213,113	.....	.....	733,347	3,807,619	107,905	.....	192,157

1943	3,416,037		791,952	3,469,993		101,132	222,106	67,348
1944	3,146,801		729,427	3,551,205		101,633	253,592	67,821
1945	.....		3,200,485	4,600,763		64,280	250,274	43,180
1946	.....		3,434,859	5,389,596		64,878	275,646	43,206
1947	.....		3,237,220	4,837,376		81,128	282,898	52,627
1948	.....		3,190,217	4,920,795		78,795	321,574	45,718
1949	.....		3,121,656	5,495,327		91,361	460,643	54,922

1901 to 1905 includes outputs from Alberta and Saskatchewan. Previous to 1922 sub-bituminous coal was included in bituminous coal.

During the year 1909 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1911 a strike affecting all the larger mines in the Province, lasted for a period of eight months.

During the year 1917 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1919 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1922 a strike affecting all the larger mines in the Province, lasted for a period of five months.

During the year 1924 a strike affecting all the larger mines in the Province, lasted for a period of six months and one-half



## THE MINES DIVISION

How the total Output of BITUMINOUS COAL from the Province was disposed of by areas during 1949:

Area	Sold for Consumption in:					Total Sales	Used under Boilers	Collaborative Railroads	Used by Railroads	Used in making Bridges and Markets	Coke	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output	
	Alberta	Saskatchewan	British Columbia	Ontario	China												
Group 1: Cascade, Highwood, Nordegg	23,807 171 318	2,430 246 .....	14,131 44 .....	9,623 1,385 .....	7,005 .....	416 .....	134,025 38,146 .....	191,457 1,846 38,464	18,897 10,351 .....	604 .....	85,802 289,895 .....	15,366 1,383 .....	764 695 .....	8,147 1,813 .....	304,743 2,958 338,280		
Group 2: Crowfoot, Mtn. Park	69,988 10,853	15,578 2,778	172,752 31,426	44,096 122,493	2,645 28,428	42,047 3,475	1,774,798 799,319	2,121,904 998,772	17,690 44,249	180 .....	30,435 28,780	91,361 20,451	123,169 61,887	194,283 15,276	110,230 9,960	3,366 1,128,903	
Group 3: Coalspur, Halcyon, Lethbridge, Morley, Pekisko, Pincher Creek, Saunders, No Area	36,669 198,659 140 7,057 778 371 6,651 16,342 280	18,667 102,157 ..... ..... ..... ..... ..... 1,355 1,332 .....	330,037 38,712 25,688 13,872 ..... ..... ..... 1,355 1,332 .....	53,814 ..... ..... ..... ..... ..... ..... 13,849 13,849 .....	34,042 2,896 ..... ..... ..... ..... ..... 6,343 6,343 .....	108 ..... ..... ..... ..... ..... ..... ..... ..... .....	266,137 ..... ..... ..... ..... ..... ..... ..... ..... .....	739,474 381,984 ..... ..... ..... ..... ..... ..... ..... .....	49,461 2,157 ..... ..... ..... ..... ..... 7,057 7,057 .....	383 16 ..... ..... ..... ..... ..... 7,778 7,778 .....	2,956 2,646 ..... ..... ..... ..... ..... 371 44,540 44,540	20,998 232 ..... ..... ..... ..... ..... 92 123 123	2,597 2,588 ..... ..... ..... ..... ..... 353 353 .....	810,675 384,331 140 7,057 870 321 50,961 280	810,675 384,331 140 7,057 870 321 50,961 280		
Total	356,008	157,972	588,659	269,607	93,720	3,475	45,467	3,012,425	4,527,333	149,242	1,167	434,912	91,361	166,814	278,951	141,127	13,326

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How the total Output of SUB-BITUMINOUS COAL from the Province was disposed of by areas during 1949:

Area	Sold for Consumption in:					Used by Railroads	Used under Boilers	Colliery Railroads	Put to Stock	Put to Waste	Dlifted from Stock	Dlifted from Waste	Total Output	
	Alberta	Saskatchewan	British Columbia	Manitoba	Ontario									
Group 4:														
Ardley.....	18,545		6,762	1,605	498			18,545			20			18,560
Big Valley.....	13,207		41,984	15,242	17,389	13,046	71	22,593		925	48			27,550
Brooks.....	32,083		3,832	5,712	3,069	928	48	119,815			813	14		119,813
Carbon.....	42,389							55,978	465		136			56,962
Champion.....									8					5,950
Drumheller.....	5,806		847,436	179,742	227,927	41,365	128	1,600,927	6,997	14,797	1,26	14,284		965
Edmonton.....	304,329		10,382	10,209	10,145	9,440		469,521	2,130	2,817	22	723		473,767
Gleichen.....	13,112		89					13,201						13,201
Milk River.....	1,302							1,302						1,302
Pembina.....	131,362		6,050	25,859	12,233			178,042	1,385	1,839	778	1,456		6
Taber.....	21,668		34,864	40,339	26,753	12,677	215	136,516		310	803			180,382
Wetaskiwin.....	1,411							1,411						137,629
Whitecourt.....	459							1,459			24	14		1,411
Group 5:														
Camrose.....	41,557		18,237	7,484	4,327	4,659	43	76,307	72		284			76,223
Castor.....	72,494		18,032	9,825	18,719	2,629		121,699	268	1,759	4,111	440		127,397
Pakowki.....	441							441		7				448
Redcliff.....	3,982		5,240	342	928	1,026		11,518						11,518
Rochester.....	32,426							426	9		85			520
Sheerness.....	32,789		20,828	445				54,062			2,622			56,684
Slave.....	75							75			481			75
Tofield.....	82,408		61,182	5,669	37,861	5,427		192,547	475	162	530	103		193,503
Westlock.....	9,108							9,108						9,697
Total.....	1,258,298		1,074,918	302,473	359,849	94,256	505	3,090,299	11,821	8	25,795	12,550	17,092	1,725,312,656

## THE MINES DIVISION

How the total output of COAL from the Province was disposed of by months during 1949:

How the total output of BITUMINOUS COAL was disposed of by months during 1949:

Month	Sold for Consumption in:					Total Output
	Alberta	Saskatchewan	British Columbia	Manitoba	Ontario	
January.....	60,261	38,158	6,110	1,051	6,200	201,133
February.....	43,438	33,586	3,167	2,424	5,602	164,193
March.....	23,724	23,388	5,853	5,633	3,255,139	14,237
April.....	11,999	4,771	10,476	799	4,545,924	14,790
May.....	15,379	5,926	39,946	9,818	1,241	342,054
June.....	11,759	11,190	37,184	1,559	2,677	343,512
July.....	16,442	9,151	32,502	13,804	4,774	210,798
August.....	27,458	11,067	45,921	20,422	9,776	267,501
September.....	34,388	13,528	50,508	23,196	13,844	384,384
October.....	39,249	14,512	51,103	23,986	16,099	255,151
November.....	40,025	18,649	57,509	27,803	17,951	415,237
December.....						465,398
Total.....	356,008	157,972	588,639	269,607	93,720	3,475
% of Total Sales.....					45,467	4,527,333
Put to Stock					1,167	3,012,423
Put to Waste					.08	1,00
Lifted from Stock					91,361	166,814
Lifted from Waste					278,951	141,127
Total Output					13,36	13,326

## THE MINES DIVISION

How the total output of SUB-BITUMINOUS COAL was disposed of by months during 1949:

Months	Sold for Consumption in:					Used under Colliery Boilers	Used by Railroads	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output	
	Alberta	Sask.- Manitoba	British Columbia	Ontario	United States								
January .....	167,571	130,733	46,134	59,496	8,524	412,458	1,761	1,937	2,538	264	427	418,003	
February .....	159,965	115,044	49,103	52,319	8,135	384,666	1,770	87	2,328	606	417	387,728	
March.....	90,335	75,039	26,658	43,314	25,588	221,934	1,205	3,301	713	1,935	334	224,884	
April.....	43,630	31,780	11,867	9,014	935	97,286	634	2,590	72	4,897	72	95,613	
May.....	46,614	45,163	12,281	11,551	1,933	117,342	612	1,209	132	1,486	440	117,569	
June.....	38,138	62,134	12,637	12,638	1,731	127,278	580	8	1,940	81	1,111	14	128,762
July.....	37,758	36,824	8,165	9,845	1,734	94,339	585	1,372	85	240	96,141	.....	189,579
August.....	63,060	76,976	20,483	21,942	4,738	46	187,245	689	2,277	95	727	.....	276,874
September.....	101,541	97,472	25,703	32,574	11,050	268,340	764	1,697	988	915	7	389,673	7
October.....	178,101	122,688	33,135	37,380	15,578	255	387,117	919	2,533	1,637	2,526	403,927	14
November.....	162,231	146,586	26,086	45,120	19,574	133	399,730	1,128	2,740	1,847	1,518	398,903	14
December.....	169,284	134,479	30,218	42,402	16,010	71	392,464	1,174	4,112	2,034	867	.....	398,903
Total.....	1,258,298	1,074,918	302,473	359,849	94,256	505	3,090,299	11,821	8	25,795	12,550	17,092	3,121,656
% of Total Sales.....	40.71	34.78	9.79	11.65	3.05	.02	.....	.....	.....	.....	.....	1,725	.....

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Amount of COAL sold during the years 1915 to 1949 (inclusive) for consumption in:

Year	Alberta	B.C.	Saskatchewan	Manitoba	Ontario	N. W.T.	Quebec	U.S.A.	To Railroads	Alaska	Total
1915	2,129,130	54,860	695,898	64,816	.....	.....	.....	25,047	.....	.....	2,969,751
1916	2,866,670	86,413	1,007,765	97,265	.....	.....	.....	61,092	.....	.....	4,119,205
1917	2,813,413	76,397	1,139,771	249,872	.....	.....	.....	93,081	.....	.....	4,372,534
1918	3,440,154	101,189	1,372,439	511,168	629	.....	.....	133,276	.....	.....	5,558,855
1919	2,991,110	95,461	1,115,329	314,290	308	.....	.....	121,212	.....	.....	4,637,710
1920	1,647,202	128,830	1,310,146	600,962	13,911	30	153,610	2,516,355	.....	.....	6,371,266
1921	1,415,861	116,089	1,294,441	495,388	9,898	.....	133,823	2,023,204	.....	.....	5,488,704
1922	1,446,942	107,926	1,371,249	520,518	21,577	102	105,514	2,076,291	.....	.....	5,647,109
1923	1,382,788	108,326	1,223,454	533,639	52,334	.....	83,557	3,110,121	.....	.....	6,514,219
1924	1,431,327	114,186	1,180,788	510,407	16,525	.....	39,142	1,613,574	.....	.....	4,914,949
1925	1,440,032	117,037	1,297,633	509,655	208,831	.....	2,139,716	1,215,740	.....	.....	5,573,431
1926	1,325,290	127,858	1,296,181	591,267	74,559	221	48,216	2,706,440	.....	.....	6,170,032
1927	1,409,089	187,028	1,427,904	612,542	22,680	.....	45,160	2,759,765	.....	.....	6,363,168
1928	1,446,555	262,198	1,511,141	605,125	44,265	.....	52,265	3,054,239	.....	.....	6,938,708
1929	1,254,382	236,840	1,455,213	588,647	55,335	.....	51,623	2,923,827	.....	.....	6,758,075
1930	1,227,385	227,385	1,221,542	541,537	27,036	33	44,291	2,120,237	.....	.....	5,419,190
1931	1,20,694	171,610	905,574	442,761	27,036	100	30,434	1,668,451	.....	.....	4,266,660
1932	1,134,311	136,188	1,087,382	497,006	27,366	135	27,366	1,619,921	.....	.....	4,532,892
1933	1,123,357	120,911	1,052,910	449,681	39,437	32	18,449	1,500,061	.....	.....	4,304,838
1934	1,087,898	127,638	986,639	391,132	55,947	31	13,739	1,687,850	.....	.....	4,350,874
1935	1,246,959	221,758	1,120,816	435,813	64,639	.....	47,712	1,960,555	.....	.....	5,075,272
1936	1,336,690	244,928	1,238,730	450,740	65,886	.....	27,397	1,969,569	.....	.....	5,353,940
1937	1,202,654	269,023	1,085,812	437,954	62,521	82	41,328	2,028,389	.....	.....	5,251,163
1938	1,278,932	238,435	1,011,207	413,663	74,111	83	32,507	1,871,852	.....	.....	4,920,790
1939	1,241,618	239,227	1,044,367	409,046	90,206	.....	33,139	2,109,684	.....	.....	5,167,287
1940	1,311,644	237,642	1,019,035	354,857	133,587	14	35,364	2,720,733	.....	.....	5,812,926
1941	1,335,606	304,928	1,052,913	430,663	234,606	.....	32,742	3,090,290	.....	.....	6,481,748
1942	1,474,706	652,222	1,239,669	580,336	231,258	.....	98,197	2,864,586	.....	.....	7,171,063
1943	1,360,212	864,911	1,455,612	627,368	1,160	.....	414,627	2,098,535	.....	.....	7,071,753
1944	1,324,293	678,960	1,225,075	533,027	10,163	.....	266,664	2,583,101	1,064	.....	6,742,643
1945	1,367,940	868,396	1,242,001	541,882	278,814	.....	162,698	2,416,803	.....	.....	7,098,928
1946	1,608,296	982,413	1,449,002	6,8,733	348,137	.....	137,271	2,893,207	.....	.....	8,136,694
1947	1,671,130	899,403	1,475,006	162,898	625,009	58	91,235	2,504,304	.....	.....	7,433,989
1948	1,593,760	945,700	1,413,283	202,520	629,456	58	84,493	2,312,273	7,377,914	.....	7,617,632
1949	1,614,306	891,132	1,232,890	187,976	.....	45,972	3,012,455	.....	.....	.....	7,617,632

NOTE: Previous to 1920 Railroad Coal was included in Sales in Alberta. Included in the above totals are 49,298 tons for Ships Bunkers in 1943, 20,296 in 1944, 20,394 in 1945, 21,770 in 1946 and 4,107 in 1947. The above also includes 37,865 tons shipped to China in 1946 and 27,731 in 1947, also 14,461 tons sent to Japan in 1947, and 200,947 tons in 1948, and 3,475 tons to China in 1949.

## THE MINES DIVISION

Coal produced by years from 1945 to 1949:

## BITUMINOUS COAL FIELD

Areas	1945	1946	1947	1948	1949
Group 1:					
Cascade.....	318,036	313,608	280,769	338,399	304,743
Highwood.....					2,958
Nordegg.....	315,857	333,368	343,720	319,418	338,280
Group 2:					
Crowsnest.....	1,856,540	2,256,741	1,967,880	1,917,462	2,465,426
Mtn. Park.....	970,303	1,109,465	954,949	1,105,467	1,128,903
Group 3:					
Coalspur.....	617,286	832,987	754,775	782,206	810,675
Halcourt.....	649	1,662	1,017	654	282
Lethbridge.....	451,538	469,618	462,322	395,654	384,431
Morley.....	1,603	1,238	1,738	915	140
Pekisko.....	2,739	1,885	3,389	4,200	7,057
Pincher.....	231	488	681	726	870
Prairie Creek.....	6,013		655	853	321
Saunders.....	59,926	68,146	65,342	54,482	50,961
No Area.....	42	390	139	360	280
Total.....	4,600,763	5,389,596	4,837,376	4,920,796	5,495,327

## SUB-BITUMINOUS COAL FIELD

Areas	1945	1946	1947	1948	1949
Group 4:					
Ardley.....	14,319	12,228	15,368	23,871	18,565
Big Valley.....	7,824	10,106	14,230	18,344	27,550
Brooks.....	220,114	130,604	134,643	135,826	119,815
Carbon.....	71,733	78,149	70,159	67,117	56,962
Champion.....	7,329	7,348	8,296	6,397	5,950
Drumheller.....	1,722,816	1,946,170	1,857,416	1,678,352	1,608,598
Edmonton.....	408,068	478,900	493,133	438,912	473,767
Gleichen.....	18,100	16,676	14,940	14,368	13,201
Milk River.....	2,323	1,084	1,605	1,661	1,302
Pembina.....	65,009	60,106	95,468	112,859	180,382
Taber.....	243,978	289,849	128,376	121,461	137,629
Wetaskiwin.....	1,595	1,389	1,385	1,653	1,411
Whitecourt.....	150	79	231	-----	459
Group 5:					
Camrose.....	84,836	90,766	83,512	102,917	76,223
Castor.....	85,605	71,166	72,058	106,445	127,397
High Prairie.....	85	-----	16	-----	448
Pakowki.....	385	123	-----	-----	-----
Redcliff.....	10,470	8,427	8,603	12,460	11,518
Rochester.....	7,595	5,949	5,748	-----	520
Sheerness.....	60,223	56,193	54,194	56,646	56,684
Slave.....	-----	-----	180	-----	75
Toheld.....	167,778	168,640	177,120	281,329	193,503
Westlock.....	150	907	719	9,419	9,697
Total.....	3,200,485	3,434,859	3,237,220	3,190,217	3,121,656

Total output of BITUMINOUS COAL by areas during each month:

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Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Cascade .....	28,593	22,451	27,458	23,973	24,737	25,158	12,391	29,250	27,154	26,106	30,280	27,192	304,743
Hightwood .....	1,691	316	30,335	29,217	25,334	30,507	22,969	26,700	31,090	28,036	32,375	27,951	2,955
Norddegg .....	27,788	25,932	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,997	338,280
Group 2:													
Crownnest .....	188,660	159,678	254,345	197,504	191,805	194,476	188,903	206,394	199,121	230,946	278,292	175,302	2,465,426
Mountain Park .....	89,918	71,259	116,315	88,869	83,945	75,667	61,401	95,410	94,706	104,325	132,372	114,716	1,128,903
Group 3:													
Calspur .....	73,055	62,096	80,572	62,645	54,422	61,467	43,701	65,893	72,901	71,180	87,777	74,906	810,675
Halcourt .....	70	36	50	46	10	21	24	16	22	11	16	16	282
Leithbridge .....	48,590	46,520	25,930	6,009	13,166	19,601	22,050	35,146	39,024	40,283	44,305	43,807	384,431
Morley .....	87	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	140
Pekisko .....	511	543	703	432	732	674	680	840	628	610	424	280	7,057
Pinchet .....	39	39	29	40	24	12	12	137	140	160	150	100	870
Prairie Creek .....	32	183	73	.....	.....	.....	.....	.....	.....	.....	.....	33	321
Sanders .....	6,578	6,449	4,088	810	2,416	2,911	2,003	3,912	3,931	4,803	6,369	6,691	50,961
No Area .....	81	123	76	.....	.....	.....	.....	.....	.....	.....	.....	.....	280
Total .....	465,693	395,678	539,974	409,499	396,587	410,483	354,119	463,706	468,711	506,471	612,355	472,051	5,495,327

## THE MINES DIVISION

Total output of SUB-BITUMINOUS COAL by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Ardley.....	2,912	2,993	2,136	350	31	20	33	42	825	3,339	3,065	3,134	18,565
Big Valley.....	2,484	2,243	770	190	129	157	122	299	1,998	7,736	7,512	3,910	27,550
Brooks.....	17,876	13,739	3,970	.....	.....	.....	3,018	5,201	13,490	23,104	24,421	14,996	119,815
Carbon.....	10,849	8,249	3,655	322	2,665	730	1,347	2,820	2,827	7,800	8,773	6,725	56,962
Champion.....	830	752	345	151	111	210	270	410	497	879	943	553	5,950
Drumheller.....	186,007	140,520	140,768	59,289	81,812	100,946	61,928	137,949	154,280	156,313	170,434	177,332	1,608,598
Edmonton.....	71,558	66,524	29,407	9,620	12,725	13,508	12,607	21,891	36,756	61,720	68,830	68,921	473,767
Gleichen.....	1,959	1,753	765	238	162	468	427	957	924	1,784	1,975	1,789	13,201
Milk River.....	57	53	56	10	11	44	24	86	270	278	236	61	1,302
Pembina.....	22,677	20,992	19,875	14,205	11,183	6,981	9,655	9,975	13,927	16,842	11,424	22,646	180,382
Taber.....	24,148	14,186	6,191	93	142	246	273	558	19,025	24,173	25,619	20,906	137,629
Wetaskiwin.....	235	225	92	10	.....	.....	7	62	255	298	227	1,411	453
Whitecourt.....	60	.....	.....	.....	.....	14	.....	.....	.....	182	203	203	453
Group 5:													
Camrose.....	4,513	10,921	1,997	391	4,045	1,736	3,100	3,122	4,710	15,950	15,067	10,671	76,223
Castor.....	20,465	23,913	2,984	476	96	330	282	2,055	6,181	19,633	20,313	30,669	127,397
Pakowki.....	.....	.....	.....	.....	.....	.....	7	28	108	159	104	42	448
Redcliff.....	2,019	1,475	.....	55	.....	.....	67	513	1,084	2,131	3,078	1,096	11,518
Rockyford.....	7,637	6,069	3,657	3,070	1,194	557	519	766	3,687	12,299	303	217	520
Sheerness.....	50	25	7,655	7,256	3,228	2,843	2,386	2,859	10,187	33,887	10,297	6,932	56,684
Slave.....	40,136	28,469	7,655	561	2	6	.....	.....	36	1,391	1,711	2,599	193,503
Westlock.....	1,831	1,558	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,697	9,697
Total.....	418,003	387,728	224,884	95,613	117,569	128,762	96,141	189,579	270,874	389,673	403,927	398,903	3,121,656

Total Sales of BITUMINOUS COAL for consumption by Railroad Companies:

Group 1.	Cascade.....	11,071	8,975	12,193	11,978	12,180	11,319	6,185	14,005	12,460	11,318	12,589	9,752
Nordegg.....	5,581	6,867	5,319	3,413	3,413	3,74	498	.....	357	3,724	3,634	3,784	4,595
Group 2.													
Crowsnest.....	112,809	90,687	185,659	158,663	165,192	162,223	146,596	165,237	143,246	160,027	163,838	120,621	1,774,798
Mountain Park.....	54,181	43,638	82,772	69,891	67,898	61,739	42,165	64,747	71,595	70,459	93,291	76,943	799,319
Group 3:													
Coalspur.....	17,491	14,026	26,975	25,934	23,730	26,239	15,852	23,155	24,126	19,988	25,713	22,908	266,137
Total.....	201,133	164,193	312,918	269,879	262,018	210,798	267,501	255,151	265,426	299,215	334,819	3,012,425	

Total Amount of BITUMINOUS COAL disposed of by areas during each month for consumption in Alberta:

MINE RUN

Group 1:															
Cascade															
Highwood															
Nordegg															
Group 2:															
Crowsnest															
Mountain Park															
Group 3:															
Coalspur															
Halcourt															
Lethbridge															
Morley															
Petiskaw															
Pincher															
Prairie Creek															
Saunders															
Total															
4,580	4,650	2,085	1,283	1,586	1,430	1,790	2,768	3,706	4,864	3,172	3,950	35,814			

LUMP COAL

## THE MINES DIVISION

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1; Cascade.....	52	42	6	14	2	.....	.....	.....	62	17	24	63	288
Group 2; Crowsnest.....	2,272	2,045	1,175	1,046	612	887	1,093	640	1,751	2,377	1,865	1,583	17,346
Mountain Park.....	1	86	.....	44	3	.....	.....	43	.....	.....	1	.....	178
Group 3; Coalspur.....	150	230	149	46	68	276	86	201	423	1,329	227	2,668	3,357
Lethbridge.....	2,888	2,643	1,357	554	1,214	1,745	2,449	2,940	3,463	3,304	2,668	26,566	102
Prairie Creek.....	36	27	32	.....	80	120	47	118	279	160	209	324	419
Sanders.....	410	331	117	64	.....	.....	.....	.....	.....	.....	.....	.....	2,808
No Area.....	38	117	64	.....	.....	.....	.....	.....	.....	.....	.....	.....	219
Total.....	5,847	5,521	3,094	1,776	2,028	2,556	3,042	3,612	5,336	6,238	6,847	4,967	50,864

## PREPARED STOKER

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1; Cascade.....	618	355	352	262	116	166	104	233	289	320	326	301	3,442
Group 2; Crowsnest.....	370	123	38	55	59	198	109	82	62	32	55	404	985
Mountain Park.....	535	324	755	483	243	357	286	481	481	605	404	5,338	5,338
Group 3; Coalspur.....	413	546	482	72	63	184	322	561	753	627	498	784	5,305
Halcourt.....	11	105	16	.....	.....	4	6	.....	.....	5	4	2	55
Lethbridge.....	1,312	846	846	650	620	957	1,717	1,100	1,214	1,162	1,138	1,345	13,166
Pincher Creek.....	6	6	7	4	.....	6	19	30	30	40	25	19	168
Prairie Creek.....	.....	22	20	.....	.....	.....	.....	.....	.....	.....	.....	42	42
Total.....	3,265	2,486	2,515	1,713	1,286	1,617	2,345	2,385	2,654	2,697	2,628	2,910	28,501

## NUT-SLACK

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1; Cascade.....	.....	.....	.....	345	952	795	481	.....	.....	.....	.....	.....	2,573
Group 2; Crowsnest.....	1,422	3,021	919	302	81	.....	.....	.....	585	.....	.....	3,366	9,696
Group 3; Lethbridge.....	75	63	54	34	31	33	56	49	49	62	75	65	646
Prairie Creek.....	39	12	.....	.....	40	.....	24	.....	122	.....	.....	.....	51
Sanders.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	186
Total.....	1,536	3,096	973	681	1,104	828	537	73	171	647	75	3,431	13,152

Total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in ALBERTA:

MINE RUN

group 4:																				
Ardley.....	2,841	2,903	2,084	35	31	20	33	42	825	3,339	2,390	2,145	16,688							
Big Valley.....	781	657	207	27	16	.....	449	518	3,159	5,103	5,51	5,58	1,816							
Brooks.....	2,489	1,812	616	57	13	32	30	28	55	5,203	2,962	1,987	1,925	5,275						
Carbon.....	604	256	604	1,304	1,858	3,711	5,743	5,747	992	1,054	2,286	1,404	848	12,714						
Drumheller.....	1,120	1,083	382	1,304	1,597	3,457	3,64	244	8,517	9,067	13,223	11,342	92,352	92,352						
Edmonton.....	9,401	9,072	5,764	335	128	10	44	24	582	605	838	937	879	6,493						
Gleichen.....	751	673	53	56	10	.....	202	86	127	270	278	236	61	1,302						
Milk River.....	57	53	1,263	146	202	2	.....	55	28	228	259	365	426	4,437						
Pembina.....	1,316	1,263	146	183	79	10	.....	.....	.....	343	108	8	110	741						
Taber.....	24	.....	.....	.....	.....	.....	.....	7	54	204	229	190	190	1,141						
Wataskivin.....	183	185	60	.....	.....	.....	.....	.....	.....	.....	182	182	217	459						
Whitecourt.....	60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....						
group 5:																				
Cannrose.....	785	632	99	243	76	279	201	27	52	1,157	500	474	3,726							
Castor.....	5,568	4,712	1,050	.....	.....	.....	358	2,027	6,268	1,158	1,158	3,151	29,091							
Fakowli.....	.....	.....	.....	.....	.....	.....	28	108	159	159	104	42	441							
Rochester.....	766	741	4,022	3,462	900	334	250	178	255	2,822	1,308	177	406							
Sheerness.....	2,980	2,567	4,022	3,462	168	2,263	1,920	1,697	1,724	2,477	2,097	59	9,704	28,815						
Westlock.....	546	599	168	2	2	6	.....	.....	1,666	1,724	1,724	335	575	2,721						
Total.....	30,272	27,584	15,804	7,732	8,270	6,895	8,864	13,402	20,752	41,282	31,421	25,269	237,547							

## THE MINES DIVISION

## LUMP COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Ardley	71	73	52	104	75	112	15	150	738	2,288	534	810	1,540
Big Valley	832	793	356	104	75	112	42	84	122	369	1,797	1,529	8,789
Brooks	823	614	98	235	196	369	372	719	967	450	460	450	3,062
Carbon	4,366	3,389	1,461	113	85	155	210	329	386	2,870	3,045	1,864	19,853
Champion	623	258	11,896	4,177	5,108	6,171	10,915	13,226	14,423	692	734	17,401	4,401
Drumheller	19,828	18,715	11,896	2,187	2,576	3,053	3,995	5,618	10,520	19,784	22,865	15,898	17,427
Edmonton	24,445	23,586	8,187	2,69	3,02	5	97	89	3,42	294	802	845	22,937
Gleichen	886	846	2,962	1,039	834	375	712	631	802	1,084	2,962	2,524	5,283
Pembina	2,918	2,962	1,227	958	462	69	93	173	188	351	1,460	1,717	22,726
Taber	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	1,227	9,010
Group 5:													
Group 5:													
Castor	1,502	3,659	776	89	527	99	73	489	1,108	4,231	3,661	3,123	19,337
Canoose	3,937	3,452	617	109	15	29	30	1,348	1,614	5,735	4,971	8,249	30,106
Castor	176	100	.....	55	.....	67	474	1,084	1,455	436	111	135	3,982
Redcliff	2,214	1,813	489	67	70	74	69	200	2,325	4,971	3,055	1,841	17,111
Rochester	50	25	5,613	1,130	618	102	145	102	181	1,663	11,109	8,700	7,048
Sheriff	5,131	854	650	219	.....	.....	.....	.....	.....	580	778	1,300	41,754
Westlock	854	650	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,381	1,324
Total	69,883	67,830	27,909	9,148	9,704	12,131	9,146	22,002	36,591	73,988	71,664	74,163	484,159

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Ardley	283	254	101	28	9	23	11	10	58	342	65	75	140
Big Valley	200	166	7	44	168	60	192	313	357	70	80	75	298
Brooks	777	507	471	13	14	28	57	65	106	129	749	84	382
Carbon	70	67	47	1,482	1,150	1,752	834	1,905	2,547	3,554	880	662	5,180
Champion	3,472	3,993	2,382	922	1,078	1,492	1,229	1,883	6,832	8,334	3,303	74	758
Drumheller	8,080	7,756	3,654	95	123	285	307	328	40	40	6,733	3,283	29,657
Edmonton	126	123	95	.....	.....	.....	.....	.....	.....	.....	83	9,043	57,046
Gleichen	941	1,243	896	258	313	41	51	131	548	1,110	653	1,463	8,173
Pembina	871	693	315	13	36	41	51	51	1,511	1,064	805	805	6,722
Taber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 5:													
Group 5:													
Castor	864	177	96	66	69	93	418	1,447	836	724	724	724	4,859
Canoose	566	717	195	60	1	47	119	339	1,774	1,373	956	956	6,147
Castor	315	336	94	147	38	18	28	217	787	762	507	507	3,249
Sheriff	1,570	277	68	29	22	13	9	45	363	461	351	351	3,249
Tofield	178	144	83	.....	.....	.....	.....	.....	11	185	330	330	3,249
Westlock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	393	393	1,324
Total	17,459	17,140	8,585	3,092	2,888	3,764	2,724	4,924	12,021	20,405	17,004	17,004	128,943

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PREPARED STOKER

NUT-SLACK

Group 4:	Ardley	Big Valley	Carbon	Dunmehler	Edmonton	Gleichen	Pembina	Group 5:	Castor	Tofield	Westlock	Total
	15	10	5	5	5	5	5		5	5	5	6,634
	180	53	80	275	1,759	18	63		104	54	54	5,528
	3,765	3,567	4,275	585	641	151	872		97	95	95	5,199
	1,774	1,198	614	43	1,300	175	115	2,006	2,389	1,463	464	41
	.....	.....	25	2,222	.....	.....	420	479	672	650	2,697	2,493
	900	700	200	1,370	.....	.....	108	.....	210	6	.....	1,195
	.....	.....	.....	112	100	.....	.....	.....	83	14	42	3,700
	.....	.....	.....	.....	.....	.....	.....	.....	972	300	22	501
	.....	.....	.....	.....	.....	.....	.....	.....	1	3	18	3,233
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,606	3,178
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,067	41,542

## THE MINES DIVISION

## SLACK COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Ardley.....	1,269	17	156	161	380	47	222	443	813	1,599	1,483	1,827	8,566
Brooks.....	922	704	780	364	380	47	168	401	382	617	612	617	5,451
Carbon.....	37	44	5,763	3,018	4,531	4,178	3,411	4,759	5,556	9,243	9,781	11,16	133
Champlain.....	7,924	7,222	13,304	8,765	4,027	3,382	3,130	1,296	2,796	4,981	9,044	11,590	10,804
Dundreher.....	13,972	2,5	11,070	9,107	9,579	5,352	7,681	7,058	8,748	15	19	19	87,080
Gleichen.....	31	2,5	4,746	11,070	69	.....	.....	.....	6,485	4,458	8,828	8,754	94
Pembina.....	4,162	4,746	681	69	.....	.....	.....	284	388	597	763	3,673	3,673
Group 5:													
Tabor.....	648	836	388	60	1,658	475	1,173	605	333	474	785	490	7,925
Canmore.....	321	164	34	.....	.....	.....	.....	.....	.....	.....	97	97	327
Castor.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	7	7
Rochester.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	10	201
Sherness.....	463	454	193	400	457	.....	.....	10	126	181	742	8	2,934
Tofield.....	36	1,	28	.....	.....	.....	.....	91	.....	4	19	36	135
Westlock.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	30,437	28,980	26,810	16,768	19,980	13,182	13,951	16,163	21,223	28,017	30,130	34,293	279,982

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in SASKATCHEWAN:

## MINE RUN

Group 1:	Cascade.....	.....	.....	.....	.....	46	.....	.....	.....	.....	.....	.....	46
Group 2:	526	96	90	143	46	145	196	432	97	520	48	48	3,065
Crowsnest.....	730	48	.....	95	.....	.....	.....	47	47	49	49	49	287
Mountain Park.....	.....	.....	83	.....	.....	.....	.....	.....	.....	.....	.....	.....	83
Group 3:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lethbridge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	539	574	179	90	238	46	191	196	432	144	568	284	3,481

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LUMP COAT

NUT COAL

group 2: Crowsnest t. Mountain Park	139 .....	254 .....	751 .....	96 .....	145 .....	185 596	47 .....	144 .....	98 .....	195 .....	346 .....	109 .....	2,509 596
group 3: Coalsur. Saunders	321 3,603 520	286 3,130 241	80 1,086 232	84 439 37	177 608 104	1,330 270	42 1,847 73	77 943 247	131 943 244	245 2,804 357	257 3,088 460	168 3,470 668	1,868 22,348 3,753
Total	4,783	4,211	2,149	656	1,034	2,381	2,009	468	1,416	3,601	4,151	4,415	31,074

PREPARED STOKER

roup 1:													
Cascade.....	258	255	301	44	345	83	127	259	43	129	252	87	2,183
roup 2:	45	90	401	43	44	1,378	.....	.....	.....	45	87	46	757
Crownset	45	41	41	44	.....	.....	.....	.....	.....	45	45	45	1,598
Mountain Park.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
roup 3:													
Coalspur.....	1,090	764	1,141	639	591	672	299	699	759	1,162	1,340	899	10,064
Lethbridge.....	724	841	238	44	174	309	126	.....	453	430	491	173	4,023
Total.....	2,126	1,905	1,770	1,169	1,197	2,442	552	958	1,255	1,786	2,215	1,250	18,625

## THE MINES DIVISION

## NUT SLACK

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 2:													
Crownest.....	48	48	147	49	95	.....	.....	49	.....	.....	.....	48	484
Group 3:													
Saunders.....	.....	.....	.....	43	165	.....	50	71	.....	37	.....	366	
Total.....	48	48	147	49	138	165	.....	99	71	.....	37	48	840

## SLACK COAL

Group 2:	2,291	167	.....	1,326	.....	.....	.....	.....	.....	.....	.....	.....	3,617
Crownest.....	2,291	167	.....	1,326	.....	.....	.....	.....	.....	.....	.....	.....	3,617
Mountain Park.....	.....	.....	.....	85	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 3:				1,097	229	445	269	275	168	.....	.....	41	1,283
Coalspur.....	.....	.....	.....	548	548	42	187	167	275	220	334	524	1,139
Lethbridge.....	.....	.....	.....	547	548	148	148	148	436	550	388	334	3,855
Saunders.....	.....	.....	.....	3,005	548	1,326	1,411	148	674	332	299	565	676
Total.....	3,005	548	1,326	1,411	148	148	148	148	436	550	388	334	10,061

Total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in SASKATCHEWAN

## MINE RUN

Group 4:	112	215	21	43	44	.....	39	.....	91	180	288	113	1,146
Drumheller.....	500	900	206	.....	.....	.....	89	.....	75	800	800	1,000	4,681
Edmonton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
Gleichen.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 5:													
Castor.....	193	61	397	.....	.....	.....	.....	.....	.....	225	543	288	1,310
Sheerness.....	417	80	603	426	171	213	204	299	172	340	443	498	2,438
Tofield.....	716	679	614	.....	.....	.....	.....	.....	.....	130	130	204	4,168
Total.....	2,338	1,935	1,444	866	215	213	332	299	338	1,545	2,204	2,103	13,832

## LUMP COAL

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Group 4:															
Big Valley.....	3,880	1,635	397	47	.....	.....	.....	1,007	1,629	3,101	1,900	3,333	1,163	6,484	
Brooks.....	733	44	40,799	16,107	23,981	37,910	21,059	44,396	44,230	44,47	53,162	7,258	3,839	28,432	
Carbon.....	52,125	52,455	.....	.....	.....	.....	220	84	201	632	1,596	1,143	2,907	2,907	
Drumheller.....	866	337	.....	.....	.....	.....	41	43	.....	.....	680	463	1,051	4,987	
Edmonton.....	341	272	160	81	.....	.....	.....	.....	.....	87	3,632	4,041	5,393	2,893	
Penibina.....	2,104	902	217	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,792	20,101	
Taber.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Group 5:															
Camrose.....	325	455	178	.....	.....	.....	608	1,463	991	524	2,629	4,073	1,824	13,070	
Cactor.....	2,006	1,215	.....	.....	.....	.....	.....	.....	486	1,746	2,872	6,101	14,426	.....	
Redcliff.....	1,570	806	1,282	398	350	205	119	.....	39	286	1,813	798	4,312	.....	
Sheerness.....	1,511	5,708	5,569	734	405	43	118	129	165	1390	1,767	1,334	8,683	.....	
Tofield.....	.....	.....	.....	.....	.....	.....	.....	158	2,825	9,739	7,556	7,906	41,890	.....	
Total.....	74,169	65,072	42,840	16,943	24,270	38,755	24,221	48,030	55,194	73,054	90,473	83,754	636,775	.....	

## NUT COAL

Group 4:															
Brooks.....	543	288	80	.....	.....	.....	.....	.....	38	154	1,058	1,192	335	3,688	
Carbon.....	13,634	12,653	8,024	2,727	5,148	3,986	2,416	6,020	10,269	10,43	50	73	93	231	
Drumheller.....	400	191	221	160	79	40	.....	.....	39	16	82	44	10,302	96,036	
Edmonton.....	197	.....	.....	.....	.....	.....	.....	.....	403	2,445	2,327	2,327	714	802	
Penibina.....	624	239	79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,533	
Taber.....	.....	.....	.....	.....	.....	.....	.....	.....	41	.....	679	613	47	.....	
Group 5:									.....	.....	.....	.....	.....	.....	
Camrose.....	.....	86	.....	.....	.....	.....	.....	.....	41	.....	679	613	47	1,466	
Cactor.....	273	132	.....	.....	.....	.....	.....	.....	.....	.....	280	225	81	766	
Redcliff.....	194	43	375	407	330	126	41	37	41	402	550	877	423	588	
Sheerness.....	552	375	407	324	84	.....	.....	.....	.....	.....	1,635	1,070	626	3,681	
Tofield.....	2,034	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,253	6,253	
Total.....	18,451	14,647	8,750	3,141	5,274	4,104	2,456	6,138	11,247	17,361	17,003	12,188	120,760	.....	

## THE MINES DIVISION

## PREPARED STOKER

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley	356	116	39				239	618	259	278	332	149	2,748
Brooks	90	8,783	6,085	2,086	2,697	4,401	2,577	5,596	8,013	7,364	8,347	7,914	2,543
Carbon	8,575												72,438
Drumheller													
Milk River													
Pembina	87	149	84				77	79	422	313	50	124	1,422
Taber	235	117											1,758
Group 5:													
Carriere													
Castor	226	551											
Redcliff	111	108											
Sheriff	602	321	475	527	245	41							
Tofield	1,237	660	146	104	86								
Total	11,519	11,043	6,829	2,717	2,984	4,605	2,895	6,426	9,691	11,312	11,707	10,741	92,469

## NUT-SLACK

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Brooks	576	548	189	1,530	1,687	1,138							
Drumheller	3,288	3,245	3,361	834									
Group 5:													
Tofield													
Total	3,864	3,793	3,550	834	1,530	1,687	1,138	2,098	3,962	4,977	5,841	7,426	40,700

SLACK COAL

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in BRITISH COLUMBIA:

MINE RUN

roup 1:														
Cascade.....	378	396	363	123	464	465	120	.....	239	312	317	390	3,567	
Higwood.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	246	246	
roup 2:														
Crowsnest.....	546	516	278	45	409	89	.....	47	94	45	.....	.....	1,526	
Mountain Park.....	188	142	.....	.....	.....	.....	.....	46	.....	140	.....	.....	1,059	
roup 3:														
Coalspur.....	.....	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	
Total.....	1,112	1,096	641	168	873	554	120	47	379	357	457	636	6,440	

THIMP COAT

group 1; Cascades.....	679	56	364	498	569	47	.....	.....	44	.....	45	43	2,345		
group 2; Crownnest Mountain Park.....	2,504	1,693	1,310	576	488	360	223	487	953	1,303	1,052	642	11,591		
group 3; Coalspur Lethbridge.....	330	.....	522	40	158	114	173	437	124	174	125	218	2,415		
Saunders.....	17,404	15,040	16,373	11,927	8,225	9,487	9,220	12,859	15,251	13,974	14,282	13,163	154,475		
.....	2,945	3,239	3,806	693	1,054	1,261	1,586	2,905	2,382	2,191	2,715	2,842	27,619		
.....	85	88	90	85	.....	80	41	42	164	127	87	.....	889		
Total.....	23,947	20,116	22,465	13,819	10,494	11,349	11,243	16,730	16,188	17,769	18,306	16,908	199,334		

## THE MINES DIVISION

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1; Cascade.....	39	20	86	.....	44	.....	.....	46	68	.....	25	125	453
Group 2; Crowsnest.....	662	331	1,267	239	78	241	577	400	839	854	281	279	6,005
Mountain Park.....	1,867	1,682	2,847	1,543	981	459	229	145	181	.....	180	10,395	
Group 3; Coalspur.....	2,835	2,917	3,278	2,226	1,054	1,138	804	1,490	1,581	2,011	2,467	23,260	
Lethbridge.....	1,256	1,153	1,345	87	218	473	701	496	458	1,047	1,173	9,221	
Saunders.....	.....	43	.....	.....	.....	.....	35	41	.....	41	.....	160	
Total.....	6,659	6,146	8,823	4,095	2,991	1,733	2,205	2,873	2,683	3,293	4,259	4,224	49,494

## PREPARED STOKER

Group 1; Cascade.....	1,087	846	712	395	587	337	462	840	525	462	941	572	7,766
Group 2; Crowsnest.....	1,029	957	1,061	92	478	243	771	1,322	1,437	702	519	161	8,772
Mountain Park.....	552	833	799	355	1,250	195	1,203	2,012	1,168	2,060	1,216	1,843	13,486
Group 3; Coalspur.....	8,897	8,089	8,880	6,452	5,040	5,554	4,725	6,952	7,378	8,943	11,249	9,812	91,971
Lethbridge.....	213	128	46	128	83	129	148	130	129	221	315	1,798	.....
Total.....	11,778	10,853	11,580	7,340	7,483	6,412	7,290	11,274	10,638	12,296	14,146	12,703	123,793

## NUT-SLACK

Group 2; Crowsnest.....	2,299	2,146	1,850	1,276	1,192	1,225	1,223	1,380	1,167	1,559	1,883	1,387	18,587
Mountain Park.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	385	708
Total.....	2,299	2,146	1,850	1,276	1,192	1,548	1,223	1,380	1,167	1,559	1,883	1,772	19,295

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STICK COAL

total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in BRITISH COLUMBIA:

MINE RUN

LUMP COAL

## THE MINES DIVISION

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley.....	315	163	45	.....	.....	.....	.....	43	78	231	153	83	43
Brooks.....	557	330	11	18	30	112	45	.....	130	21	184	185	1,107
Carbon.....	3,318	3,937	2,429	1,530	1,473	1,725	1,161	2,411	2,311	2,567	1,981	2,222	1,706
Drumheller.....	3,316	496	65	.....	.....	41	.....	.....	152	66	21	27,065	1,197
Edmonton.....	171	133	80	57	57	77	.....	.....	104	304	212	339	1,561
Pembina.....	84	1463	827	.....	.....	.....	.....	446	1,856	2,083	2,254	12,039	.....
Taher.....	3,110	304	.....	.....	.....	.....	.....	.....	217	470	170	432	1,593
Group 5:													
Camrose.....	722	1,612	1,50	87	87	.....	.....	.....	47	49	92	62	2,426
Castor.....	36	.....	.....	.....	.....	.....	.....	.....	62	329	162	132	829
Redcliff.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tofield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	8,638	8,563	3,682	1,621	1,548	1,794	1,330	2,409	3,286	5,710	5,319	5,698	49,698

## PREPARED STOKER

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Brooks.....	269	345	118	.....	.....	.....	.....	32	111	151	364	232	1,622
Carbon.....	277	321	.....	.....	.....	.....	.....	129	.....	140	.....	45	912
Drumheller.....	2,268	1,915	2,356	1,531	2,284	1,577	1,036	2,114	1,509	2,478	1,09	1,341	21,918
Edmonton.....	135	87	.....	.....	44	.....	44	82	42	797	98	92	482
Pembina.....	82	1,139	1,659	331	.....	.....	.....	288	518	448	179	637	6,336
Taher.....	496	342	79	.....	.....	.....	.....	.....	352	.....	.....	517	2,413
Group 5:													
Camrose.....	486	628	.....	.....	.....	.....	41	.....	129	160	45	42	417
Castor.....	91	146	.....	.....	.....	.....	.....	66	.....	45	115	78	1,114
Tofield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	541
Total.....	4,847	4,923	4,212	1,862	2,284	1,621	1,153	2,790	2,659	4,334	2,318	2,752	35,755

NUT-SLACK

group 4; Drumheller.....	247	403	189	.....	.....	90	44	43	84	.....	.....	.....	1,100
Pembina.....	.....	.....	938	.....	.....	292	520	462	272	570	.....	667	4,182
group 5; Tohle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	.....	.....	1.5
Total.....	247	403	189	938	461	382	564	505	272	669	.....	667	5,297

SLACK COAL

round 4:									
Brooks.....	511	332	64	.....	.....	.....	.....	.....	907
Drumheller.....	525	832	579	.....	.....	.....	.....	.....	1,960
Pembina.....	2,533	1,454	49	.....	.....	.....	.....	.....	6,682
Taber.....	1,693	804	617	.....	.....	.....	.....	.....	3,642
Total.....	4,982	4,401	2,714	49	.....	.....	.....	.....	13,191

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in MANITOBA:

MINE RUN

Group 1; Cascade.	89	201	134	.....	46	46	.....	168	90	46	126	90	1,036	
Group 2; Crownnest.	287	217	232	.....	47	47	.....	95	87	129	187	176	1,457	
Group 3; Mountain Park.	414	.....	97	.....	47	717	.....	746	773	968	1,027	1,398	7,066	
Highwood.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	44	44
Total.	790	418	463	.....	140	763	879	1,009	950	1,143	1,340	1,708	9,603	

## THE MINES DIVISION

## LUMP COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1; Cascade.....	88	299	290	.....	46	.....	.....	.....	89	45	178	90	1,125
Group 2; Crowsnest.....	825	934	1,419	270	488	526	660	892	812	949	536	536	8,780
Mountain Park.....	594	178	211	82	54	84	148	42	139	98	224	224	1,938
Group 3; Coalspur.....	3,751	4,125	3,508	703	2,181	3,453	1,935	2,258	2,758	3,526	4,532	4,037	36,767
Lethbridge.....	2,210	2,481	1,888	292	550	1,605	1,300	2,188	1,738	1,339	1,704	1,661	18,956
Saunders.....	1,357	1,657	672	167	602	475	394	782	818	994	1,119	1,328	10,356
Total.....	8,825	9,674	7,988	1,514	3,875	6,189	4,182	6,036	6,337	6,835	8,580	7,876	77,931

## NUT COAL

Group 1; Cascade.....	.....	.....	.....	.....	.....	.....	43	.....	44	.....	.....	.....	87
Group 2; Crowsnest.....	1,827	1,329	1,464	47	.....	146	142	2,558	2,143	377	411	411	11,623
Mountain Park.....	538	185	.....	.....	.....	45	47	.....	.....	.....	815	815	.....
Group 3; Coalspur.....	201	195	335	40	83	124	292	82	123	417	203	203	2,095
Lethbridge.....	654	837	442	44	174	344	238	1,608	129	514	560	560	6,078
Saunders.....	154	227	201	34	79	43	69	72	41	265	70	70	1,255
Total.....	3,374	2,773	2,442	125	293	573	612	3,238	2,841	2,865	1,573	1,244	21,953

## PREARED STOKER

Group 1; Cascade.....	796	1,239	1,122	778	260	212	299	591	534	663	755	755	7,375
Group 2; Crowsnest.....	363	724	276	1,159	793	45	46	390	529	666	4,188	4,188	3,057
Mountain Park.....	2,363	2,402	2,078	1,409	.....	910	1,951	2,457	4,246	4,246	4,433	4,433	28,389
Group 3; Coalspur.....	2,586	2,537	971	54	150	503	340	343	970	702	1,885	1,885	12,284
Lethbridge.....	45	.....	.....	.....	.....	479	87	.....	.....	.....	43	43	6,64
Total.....	6,108	6,965	4,447	2,241	1,569	1,708	1,421	3,118	4,495	6,011	7,402	7,402	51,759

## NUT-SLACK

Group 2:												
Crownest.....	5,879	4,966	2,404	392	315	1,479	406	48	97	16,310		
Mountain Park.....	6,739	2,227	174	113	.....	.....	1,415	2,825	4,109	17,602		
Group 3:												
Saunders.....	.....	.....	.....	.....	37	77	.....	.....	.....	.....	114	
Total.....	12,618	7,193	2,578	505	324	352	1,556	1,821	2,873	4,206	34,026	

## SLACK COAL

Group 2:												
Crownest.....	5,555	5,647	6,280	5,977	3,737	6,396	6,312	6,519	2,869	4,930	5,759	2,869
Mountain Park.....	599	622	1,076	45	85	91	74	150	66	43	41	66,683
Group 3:												
Coldspur.....	289	294	114	69	119	38	.....	146	318	235	269	2,668
Saunders.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2115	
Total.....	6,443	6,563	6,470	6,091	3,941	6,525	6,386	6,669	7,017	5,291	6,035	6,904
												74,335

Total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in MANITOBA:

## MINE RUN

Group 4:												
Drumbeller.....	86	.....	43	.....	.....	.....	.....	.....	42	.....	171	
Group 5:												
Castor.....	629	852	60	.....	.....	.....	48	.....	46	818	147	2,600
Tofield.....	1,007	.....	.....	.....	.....	.....	.....	.....	.....	186	.....	1,193
Total.....	1,722	852	103	.....	.....	.....	48	.....	46	1,046	147	3,964

## THE MINES DIVISION

## LUMP COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley.....	1,833	1,279	888	.....	.....	.....	.....	498	419	45	198	205	498
Brooks.....	368	211	507	.....	.....	.....	.....	231	215	2,036	2,522	2,893	14,700
Carbon.....	21,627	23,564	19,187	7,899	10,175	10,762	7,416	17,383	19,026	16,993	21,249	510	363
Drumheller.....	971	913	40	449	40	45	45	167	676	1,415	2,181	607	19,726
Edmonton.....	1,370	2,767	465	.....	.....	.....	.....	.....	3291	607	611	4,069	830
Pembina.....	3,577	2,767	465	.....	.....	.....	.....	.....	2,691	2,273	4,662	4,662	5,723
Group 5:													
Camrose.....	281	521	47	.....	.....	.....	.....	265	299	615	798	798	553
Castor.....	1,358	2,362	116	.....	.....	.....	.....	22	772	1,925	1,804	1,804	3,379
Redcliff.....	218	83	212	236	120	132	90	43	1,531	85	297	2,440	4,499
Tofield.....	9,933	7,830	212	.....	.....	.....	.....	.....	3,856	3,856	3,202	3,202	12,858
Total.....	41,536	40,999	12,765	8,175	10,295	10,894	8,280	18,514	27,441	30,785	37,057	37,197	292,938

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Brooks.....	80	160	69	.....	.....	.....	.....	74	153	315	339	184	55
Carbon.....	3,078	2,818	19	2,566	744	942	1,280	996	2,975	2,074	2,176	2,118	1,429
Drumheller.....	691	453	363	189	446	44	.....	.....	41	40	120	1,260	19
Edmonton.....	740	721	446	44	.....	.....	.....	.....	39	1,131	45	44	2,613
Pembina.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,131	1,410	1,410	1,504
Taber.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,214	1,214	5,005
Group 5:													
Camrose.....	.....	173	.....	.....	.....	.....	.....	.....	87	167	92	92	519
Castor.....	87	354	45	462	41	41	41	41	171	443	315	483	1,853
Redcliff.....	41	41	462	462	462	462	462	462	462	462	45	45	131
Tofield.....	3,183	3,183	462	462	462	462	462	462	462	462	95	95	3,961
Total.....	8,621	5,293	2,868	744	942	1,280	1,070	2,469	2,799	4,569	5,563	4,044	40,262

## PREPARED STOKER

Group 4:														
Brooks	77	38	39	38	45	51	314	423	413	705	1,015	715	219	
Carbon	214	45	45	45	479	51	.....	.....	.....	.....	.....	.....	76	80
Drumheller	1,400	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	78	684
Edmonton	379	1,771	1,771	1,771	1,771	1,771	1,771	1,771	1,771	1,771	1,771	1,771	304	304
Pembina	2,158	39	128	128	128	128	128	128	128	128	128	128	345	345
Taber	610	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	379	379
Group 5:														
Carriose	183	123	41	41	41	41	41	41	41	41	41	41	40	429
Castor	213	924	72	72	72	72	72	72	72	72	72	72	45	48
Redcliff	860	617	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152	152
Tofield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,183	2,183
Total	6,166	4,959	732	51	314	423	451	782	1,870	1,613	1,080	554	18,995	18,995

## NUT-SLACK

Group 4:														
Brooks	360	170	51	44	44	44	41	41	44	129	77	349	209	290
Drumheller	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84	84
Group 5:														
Tofield	860	170	51	44	44	44	41	41	44	129	426	347	347	356
Total	591	46	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	374	356

## SLACK COAL

Group 4:														
Pembina	314	46	69	.....	.....	.....	.....	.....	.....	38	.....	.....	.....	360
Taber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107
Group 5:														
Tofield	277	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	50
Total	591	46	69	.....	.....	.....	.....	.....	.....	38	.....	.....	54	331

Total	591	46	69	.....	.....	.....	.....	.....	.....	38	.....	.....	104	848
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## THE MINES DIVISION

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in ONTARIO:

## MINE RUN

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Highwood.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	246
Group 2:													25,115
Mountain Park.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,361
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	246

## LUMP COAL

Group 1:													
Cascade.....	681	.....	.....	.....	.....	290	426	345	577	401	701	1,128	4,549
Highwood.....	809	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	889
Group 2:													
Crownest.....	89	52	274	46	125	41	.....	.....	46	271	408	154	1,516
Mountain Park.....	429	414	414	.....	.....	.....	.....	.....	.....	43	.....	.....	886
Group 3:													
Coalspur.....	1,576	1,399	1,457	436	474	553	1,019	1,655	2,813	3,859	4,896	4,101	24,238
Lethbridge.....	549	638	2,105	41	254	375	156	594	1,466	1,290	1,592	1,765	10,040
Saunders.....	363	396	663	.....	.....	421	352	421	352	680	860	687	5,207
Total.....	4,496	2,565	4,913	523	863	1,259	1,601	3,015	5,254	6,544	8,457	7,835	47,325

## NUT COAL

Group 1:													
Cascade.....	250	.....	.....	.....	.....	.....	.....	.....	.....	.....	189	205	394
Highwood.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	250
Group 2:													
Crownest.....	.....	.....	61	.....	.....	.....	189	136	74	122	80	80	662
Group 3:													
Coalspur.....	760	400	493	156	84	172	88	626	1,664	1,802	1,610	1,105	8,960
Lethbridge.....	208	47	143	64	87	121	146	121	439	905	986	986	3,146
Prairie Creek.....	40	77	129	32	41	81	41	79	178	212	159	159	77
Total.....	1,258	524	765	156	241	300	169	977	2,025	2,493	3,038	2,535	14,481

## PREPARED STOKER

Group 1:															
Cascade.....	174	.....	63	.....	137	.....	.....	295	452	489	452	2,062			
Group 2:															
Mountain Park..	44	78	.....	.....	.....	.....	.....	328	556	386	386	1,382			
Group 3:															
Coaldale.....	41	.....	.....	.....	.....	111	51	352	72	217	844				
Lethbridge.....	71	.....	.....	.....	.....	180	70	225	70	140	686				
Total.....	218	78	175	.....	137	.....	111	526	922	1,622	1,195	4,984			

## NUT-SLACK

Group 2:															
Crownnest.....	.....	.....	.....	120	.....	.....	143	.....	.....	122	64	329			
Mountain Park..	.....	.....	.....	120	.....	.....	143	.....	.....	122	64	120			
Total.....	.....	.....	120	.....	.....	143	.....	.....	122	64	449				

## SLACK COAL.

Group 2:															
Crownnest.....	138	.....	.....	.....	.....	.....	.....	243	.....	.....	672	138			
Mountain Park..	.....	.....	.....	.....	.....	.....	.....	67	.....	.....	672	915			
Group 3:								310	.....	.....	672	67			
Saunders.....	.....	.....	.....	.....	.....	.....	.....	310	.....	.....	672	1,120			
Total.....	138	.....	.....	.....	.....	.....	.....	310	.....	.....	672	1,120			

## THE MINES DIVISION

Total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in ONTARIO:

## LUMP COAL.

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley.....	483	1,396	621	.....	.....	.....	.....	168	522	1,374	45	321	521
Brooks.....	45	1,942	1,962	1,429	1,039	2,692	2,778	424	1,374	2,147	2,632	1,867	11,210
Carbon.....	2,634	1,942	650	42	288	456	856	3,766	1,364	1,44	3,418	5,973	29,960
Drunheller.....	614	404	45	.....	.....	.....	.....	456	95	308	2,862	1,759	8,924
Edmonton.....	339	84	201	.....	.....	.....	.....	234	.....	95	692	4,55	1,973
Pembina.....	804	771	45	45	47	41	89	.....	1,580	922	373	318	4,969
Taber.....	327	473	213	252	43	43	43	43	47	48	355	1,026	816
Group 5:	93	424	424	503	400	.....	.....	.....	.....	.....	383	668	95
Camrose.....	3,081	5,768	738	1,471	1,394	1,476	3,759	8,514	10,946	12,153	12,523	821	68,089
Total.....	6,266	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## NUT COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Brooks.....	82	134	.....	.....	.....	.....	.....	.....	.....	164	260	395	108
Carbon.....	192	393	770	85	462	337	213	627	828	1,060	132	93	1,143
Drunheller.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47	859	1,124	225
Edmonton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	316	51	316	6,950
Pembina.....	948	832	290	.....	.....	.....	.....	.....	857	1,645	1,831	43	477
Taber.....	90	175	228	247	414	.....	.....	.....	178	219	602	44	177
Group 5:	133	133	247	.....	.....	.....	.....	.....	.....	.....	89	81	444
Camrose.....	414	.....	.....	.....	.....	.....	.....	.....	.....	33	.....	30	559
Castor.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	477	477
Redcliff.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tofield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,859	2,009	1,060	85	462	337	213	627	2,027	3,568	4,282	2,443	18,972

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PREPARED STOKER

NUT-SLACK

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in CHINA:

Total amount of BITUMINOUS COAL disposed of by areas during each month for consumption in UNITED STATES:

MINE RUN

## THE MINES DIVISION

## LUMP COAL

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Crownnest.....	706	552	247	.....	45	.....	.....	84	175	133	214	176	2,417
Group 3:					.....	.....	.....	40	251	231	222	104	1,928
Lethbridge.....	448	450	182	.....	.....	.....	45	.....	.....	.....	.....	.....	.....
Total.....	1,154	1,002	429	.....	.....	.....	85	124	426	364	436	280	4,345

## NUT COAL

Group 2:													
Crownnest.....	3,820	3,503	3,923	1,389	719	1,169	2,040	1,614	2,275	3,696	3,299	2,690	30,137
Group 3:				56	.....	.....	.....	.....	.....	99	96	43	56
Coalspur.....	95	141	190	.....	51	.....	.....	.....	.....	.....	.....	.....	715
Lethbridge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	3,915	3,644	4,113	1,445	719	1,220	2,040	1,614	2,275	3,795	3,395	2,733	30,908

## PREPARED STOKER

Group 1:													
Cascade.....	.....	.....	75	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
Group 2:				45	171	564	217	83	.....	143	232	187	2,006
Crownnest.....	258	106	.....	52	.....	.....	60	.....	.....	46	.....	46	52
Group 3:				.....	.....	.....	.....	.....	.....	.....	.....	.....	253
Coalspur.....	46	55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lethbridge.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	304	161	75	97	171	564	217	143	.....	189	232	233	2,386

## NUT-SLACK

Group 1:													
Cascade.....	.....	.....	228	.....	.....	.....	.....	.....	.....	.....	.....	.....	228
Group 2:			486	352	278	280	.....	48	465	.....	62	62	2,810
Crownnest.....	827	62	.....	.....	.....	.....	.....	48	465	.....	62	62	3,038
Total.....	827	62	714	352	278	280	.....	48	465	.....	62	62	.....

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**SLACK COAL**

Group 1; Casade.....	.....	.....	.....	.....	.....	.....	113	.....	.....	.....	113
Group 2; Crownest.....	.....	.....	.....	.....	57	71	514	.....	.....	.....	642
Total.....	.....	.....	.....	57	71	113	514	.....	.....	.....	755

Total amount of SUB-BITUMINOUS COAL disposed of by areas during each month for consumption in UNITED STATES:

**LUMP COAL**

Group 4; Carbon.....	.....	.....	.....	.....	46	.....	.....	.....	48	.....	46
Drumheller.....	.....	.....	.....	.....	46	.....	.....	.....	48	.....	48
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94

**NUT COAL**

Group 4; Drumheller.....	.....	.....	.....	.....	.....	.....	40	42	.....	.....	82
Total.....	.....	.....	.....	.....	.....	.....	40	42	.....	.....	82

**PREPARED STOKER**

Group 4; Brooks.....	.....	.....	.....	.....	.....	.....	215	.....	.....	.....	215
Taber.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
Group 5; Carrose.....	.....	.....	.....	.....	.....	.....	43	.....	.....	.....	43
Total.....	.....	.....	.....	.....	.....	.....	215	43	71	.....	329

## THE MINES DIVISION

Amount of BITUMINOUS COAL used under COLLIERY BOILERS by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Cascade.....	1,590	1,634	1,800	1,544	1,528	1,477	980	1,515	1,511	1,595	1,713	2,010	18,897
Nordegg.....	1,084	1,036	1,113	903	992	864	641	473	809	880	770	786	10,351
Group 2:													
Crownest.....	2,052	1,982	2,086	1,511	1,130	1,139	1,102	1,167	1,087	1,347	1,551	1,536	17,690
Mountain Park.....	4,555	4,333	4,365	3,763	3,476	3,376	3,053	3,277	3,230	3,551	3,601	3,669	44,249
Group 3:													
Coalspur.....	4,729	4,189	4,687	4,065	3,597	4,341	3,470	4,726	4,263	4,226	3,157	4,001	49,461
Halcourt.....	3	3	221	57	61	44	1	1	1	1	1	3	16
Lethbridge.....	374	337	515	266	473	416	329	82	99	207	261	367	2,157
Saunders.....	732	713	11,243	11,243	11,243	11,243	11,243	11,243	11,243	11,243	11,243	11,243	6,421
Total.....	15,119	14,237	14,790	12,109	11,674	9,619	11,761	11,576	12,401	11,753	12,960	149,242	

Amount of SUB-BITUMINOUS COAL used under COLLIERY BOILERS by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Carbon.....	100	90	30	10	385	382	20	40	40	80	75	485	
Drumheller.....	899	998	784	419	33	82	362	401	458	547	604	758	6,997
Edmonton.....	387	337	201	135	120	95	83	123	156	207	187	251	2,130
Pembina.....	265	235	135	120	95	83	95	80	50	50	40	40	1,385
Group 5:													
Camrose.....	10	10	5	2	.....	5	.....	5	5	10	10	10	72
Castor.....	50	50	50	50	50	50	25	25	25	25	108	60	268
Rochester.....	50	50	50	50	50	50	25	25	25	25	4	50	9
Tofield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	475
Total.....	1,761	1,770	1,205	634	612	580	585	689	764	919	1,128	1,174	11,821

Amount of BITUMINOUS COAL used by COLLIERY RAILROADS by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Cascade.....	53	48	55	58	50	55	25	55	52	52	53	48	604
Group 2:													
Crownest.....	15	15	15	15	15	15	15	15	15	15	15	15	180
Group 3:													
Coalspur.....	35	29	36	36	36	36	9	33	63	34	34	38	383
Total.....	103	92	106	109	101	70	49	103	130	101	102	101	1,167

AN AMOUNT of SUB-BITUMINOUS COAL used by COLLIERY RAILROADS by areas during each month:

Group 4:							
Champion.....							8
Total.....							8

A mount of BITUMINOUS COAL used making Briquettes:

Amount of BITUMINOUS COAL used making Coke:

Group 2: Crownset.....	7,183	6,419	7,406	7,346	7,506	7,544	8,139	8,303	7,728	7,945	7,964	7,878	91,361
Total.....	7,183	6,419	7,406	7,346	7,506	7,544	8,139	8,303	7,728	7,945	7,964	7,878	91,361

Amount of BITUMINOUS COAL put to STOCK by areas during each month:

group 1:													
Cascade.....	1,118	331	859	1,371	391	1,178	512	1,473	1,313	2,206	2,239	2,375	15,366
Highwood.....	267	80	275	.....	.....	.....	.....	.....	.....	.....	.....	70	417
Nordeg.....	450	100	.....	.....	375	.....	25	.....	158	.....	.....	.....	1,383
group 2:													
Crownest.....	12,890	13,492	5,218	4,919	391	2,992	6,833	7,171	11,844	17,164	19,248	21,007	123,169
Mountain Park.....	1,080	3,628	9,498	2,697	.....	326	391	436	1,715	680	.....	.....	20,451
group 3:													
Coalspur.....	106	27	39	84	28	806	424	744	169	104	136	289	2,956
Lethbridge.....	197	161	641	212	210	157	103	158	212	230	159	206	2,646
Prairie Creek.....	.....	58	10	.....	.....	204	.....	49	.....	.....	.....	5	273
Saunders.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	353	353
Total.....	17,877	16,640	9,283	1,020	6,038	8,263	10,056	15,411	20,384	21,782	23,952	166,814	

## THE MINES DIVISION

Amount of SUB-BITUMINOUS COAL put to stock by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley.....	346	87	2,557	2,590	1,209	1,940	1,351	2,068	350	1,800	1,430	500	4,080
Drumheller.....	237	.....	.....	.....	.....	.....	.....	209	1,266	647	403	333	14,797
Edmonton.....	1,065	744	.....	.....	.....	.....	.....	.....	80	80	30	1,405	2,817
Pembina.....	260	.....	.....	.....	.....	.....	14	.....	.....	.....	50	10	1,839
Taher.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	310
Whitecourt.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
Group 5:													
Castor.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	1,759	1,759	1,759
Pakowki.....	26	.....	.....	.....	.....	.....	.....	.....	6	72	55	7	162
Westlock.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	1,937	87	3,301	2,590	1,209	1,940	1,372	2,277	1,687	2,533	2,740	4,112	25,795

Amount of BITUMINOUS COAL put to WASTE by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Cascade.....	200	35	30	20	34	56	50	45	75	60	75	75	764
Highbwood.....	365	.....	.....	.....	.....	.....	.....	.....	.....	.....	330	330	695
Group 2:													
Crownest.....	11,104	8,449	16,718	10,477	9,082	9,821	10,707	10,809	13,215	13,280	60,919	19,702	194,283
Mountain Park.....	7,194	2,585	5,760	2,230	1,667	2,884	1,640	5,291	5,502	6,245	12,493	8,396	61,887
Group 3:													
Coalspur.....	1,443	1,848	1,553	1,402	1,398	1,402	1,077	1,581	1,863	2,900	2,313	2,313	20,998
Lethbridge.....	20	14	11	11	11	14	19	24	23	25	27	24	232
Pincher.....	.....	.....	.....	.....	.....	.....	.....	15	15	20	22	20	92
Total.....	20,620	12,532	24,370	14,291	12,192	14,177	13,493	17,765	20,693	21,513	76,436	30,869	278,951

Amount of SUB-BITUMINOUS COAL put to WASTE by areas during each month:

group 4:																			
Ardley.....	125	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
Big Valley.....	154	59	31	15	9	4	3	3	4	6	35	180	200	20	20	20	20	20	925
Carbon.....	39	22	15	107	107	14	14	14	14	14	5	234	213	83	83	83	83	83	813
Champion.....	427	417	100	100	100	11	13	32	34	34	11	150	150	11	11	11	11	11	1,126
Drumheller.....	76	102	50	50	50	11	13	32	34	34	3	35	245	22	22	22	22	22	22
Pembina.....	49	38	14	14	14	5	5	5	5	5	3	144	112	87	87	87	87	87	578
Taber.....	1,231	1,416	145	145	145	6	6	6	6	6	3	100	100	94	94	94	94	94	803
group 5:																			
Canrose.....	222	130	217	40	40	110	32	32	43	43	3	289	80	122	817	817	817	817	284
Castor.....	100	50	10	6	6	24	24	24	24	24	2	95	688	478	478	478	478	478	4,111
Sheerness.....	115	94	24	24	24	24	24	24	24	24	2	15	100	50	50	50	50	50	2,622
Rochester.....																			85
Tofield.....																			481
Westlock.....																			530
Total.....	2,538	2,328	713	72	72	132	81	81	81	81	95	988	1,637	1,847	2,034	2,034	2,034	2,034	12,550

Amount of BITUMINOUS COAL lifted from STOCK by areas during each month:

group 1:														
Cascade.....	361	1,384	938	928	1,082	391	751	368	470	426	482	566	8,147	
Nordegg.....	25	400	2	283	240	.....	105	.....	.....	370	183	205	1,813	
group 2:														
Crownest.....	9,259	8,548	10,367	5,195	8,181	7,357	903	7,683	8,214	9,069	12,617	22,837	110,230	
Mountain Park.....	.....	.....	.....	491	.....	3,275	514	563	6,462	2,069	1,362	.....	15,276	
group 3:														
Coalspur.....	78	105	105	118	84	39	95	22	282	498	1,035	221	2,597	
Lethbridge.....	169	197	156	641	212	210	157	103	153	207	237	156	2,588	
Prairie Creek.....	105	18	100	.....	.....	.....	204	.....	49	.....	.....	.....	123	
Saunders*.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	353	
Total.....	9,997	10,634	11,481	7,756	9,799	11,272	2,799	8,739	15,630	13,179	15,926	23,985	141,127	

Amount of SUB-BITUMINOUS COAL lifted from STOCK by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Big Valley.....													
Drumheller.....													
Edmonton.....													
Pembina.....													
Whitecourt.....													
Group 5:													
Castor.....													
Westlock.....													
Total.....	264	606	1,935	4,897	1,486	1,111	240	727	915	2,526	1,518	867	17,092

Amount of BITUMINOUS COAL lifted from WASTE by areas during each month:

Amount of SUB-BITUMINOUS COAL lifted from WASTE by areas during each month:

## OUTPUT AND NUMBER OF MINES PRODUCING

Kind of Coal	Under 1,000 tons		1,000 to 5,000 tons		5,000 to 10,000 tons		10,000 to 50,000 tons		50,000 to 100,000 tons		100,000 to 150,000 tons		150,000 to 200,000 tons		200,000 to 300,000 tons		300,000 tons and over		Total	
	No.	Output	No.		Output		No.		Output		No.		Output		No.		Output			
			No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output		
Bituminous.....	9	3,385	5	11,054	2	12,612	6	136,533	2	159,453	1	118,818	4	708,798	3	798,434	8	3,546,220	40	5,495,327
Sub Bituminous.....	52	22,374	53	121,685	16	117,792	22	544,296	10	690,918	8	941,838	4	682,753	....	....	....	....	165	3,121,636
Total.....	61	25,759	58	132,739	18	130,404	28	680,849	12	850,371	9	1,060,656	8	1,391,551	3	798,434	8	3,546,220	205	8,616,983

## THE MINES DIVISION

Number of men employed in the BITUMINOUS FIELD as at December 31st, 1949:

AREAS	UNDERGROUND		ABOVE GROUND		STRIPPING		GRAND TOTALS	
	Miners	Forermen	Miners	Forermen	Miners	Forermen	Total Employees	Grand Total
Group 1:								
Cascade	27	2	125	20	24	1	30	361
Highwood	2	2	6	3	13	2	17	51
Nordegg	6	11	46	92	271	15	9	35
Group 2:								
Crowsnest	106	14	777	322	1,544	101	270	2,233
Mountain Park	24	104	68	68	264	32	90	234
Group 3:								
Halcourt	26	1	212	54	90	382	21	476
Lethbridge	32	5	329	52	108	526	33	591
Pekisko	1	1	7	3	8	5	1	15
Pincher	1	1	3	1	5	1	5	11
Prairie Creek	6	3	74	6	9	98	5	151
Saunders	67	1,753	571	740	3,334	234	18	5,123
Total	203	67	1,753	571	740	3,334	108	5,658

Number of men employed in the SUB-BITUMINOUS FIELD as at December 31st, 1949:

Biriminuous Field	203	67	1,753	571	740	3,334	234	18	103	108	577	407	170	1,617	102	605	535	5,123	5,658	
Sub Bituminous Field	102	143	1,620	368	399	2,632	112	15	7	38	256	83	45	556	147	597	744	361	3,571	3,932
Total	305	210	2,373	939	1,139	5,966	346	33	110	146	833	490	215	2,173	249	1,202	1,451	896	8,694	9,590

## THE MINES DIVISION

Men employed above and below ground in the BITUMINOUS FIELD by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 1:													
Cascade.....	344	323	318	328	340	333	337	351	349	366	379	382	346
Hightwood.....	64	27	.....	.....	.....	.....	378	402	399	.....	50	50	12
Nordegg.....	420	385	365	376	362	367	.....	.....	436	426	429	429	395
Group 2:													
Crossnest.....	2,513	2,498	2,446	2,382	2,406	2,443	2,383	2,271	2,413	2,413	2,494	2,469	2,432
Mountain Park.....	942	911	894	893	768	758	729	721	692	699	723	703	786
Group 3:													
Coalspur.....	702	679	627	629	619	626	673	676	711	798	748	683	683
Halcourt.....	1	1	2	2	1	1	1	1	1	1	1	1	1
Lethbridge.....	722	727	726	667	530	518	540	594	629	674	713	720	646
Morley.....	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Pekisko.....	7	8	8	9	8	8	8	11	9	9	9	9	8
Pincher.....	4	3	3	3	2	2	2	4	4	4	5	5	3
Prairie Creek.....	6	7	7	7	7	7	7	7	7	7	3	3	2
Saunders.....	150	151	148	148	148	92	94	93	101	102	109	130	115
No Area.....	1	1	1	1	1	1	1	1	1	1	1	1	1
Total.....	5,878	5,748	5,615	5,427	5,115	5,106	5,155	5,241	5,132	5,422	5,678	5,658	5,431

Men employed above and below ground in the SUB-BITUMINOUS FIELD by areas during each month:

Area	January	February	March	April	May	June	July	August	September	October	November	December	Total
Group 4:													
Ardley.....	21	23	28	3	2	3	3	3	9	22	44	29	16
Big Valley.....	41	38	34	21	13	10	12	15	29	53	45	29	28
Brooks.....	90	89	87	.....	55	81	79	90	97	98	95	95	67
Carbon.....	158	126	151	46	31	56	77	60	120	128	98	128	92
Champion.....	19	19	21	12	9	10	7	10	117	117	16	15	13
Druntheller.....	2,367	2,336	2,261	1,932	1,893	1,893	1,904	2,012	2,078	2,117	2,179	2,188	2,097
Edmonton.....	724	690	563	205	220	229	287	319	446	664	718	723	480
Gleichen.....	57	55	43	20	14	16	20	18	38	48	51	51	33
Milk River.....	2	3	3	1	1	2	2	3	6	5	3	2	3
Pembina.....	117	79	96	61	71	39	46	53	58	77	62	95	71
Taher.....	69	67	38	6	7	6	8	9	32	86	83	97	42
Weastiwinn.....	5	3	2	.....	.....	.....	2	3	5	5	6	6	3
Whitecourt.....	2	.....	.....	.....	3	.....	.....	.....	2	2	6	6	2
Group 5:													
Cambrose.....	71	125	79	31	25	42	62	78	79	96	99	95	73
Castor.....	167	155	61	16	4	59	56	45	105	160	177	223	102
Pakowki.....	31	25	.....	10	.....	.....	1	2	1	1	2	2	1
Redcliff.....	28	29	28	16	14	18	8	13	30	44	42	37	26
Rochester.....	1	2	.....	63	50	49	35	49	65	102	100	88	73
Sherness.....	109	102	67	3	1	.....	2	5	17	19	19	20	9
Slave.....	18	15	12	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tofield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Westlock.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	4,097	3,981	3,575	2,448	2,379	2,408	2,571	2,808	3,159	3,747	3,909	3,932	3,251
Bituminous.....	5,878	5,748	5,615	5,427	5,115	5,106	5,155	5,241	5,132	5,422	5,678	5,658	5,431
Sub Bituminous.....	4,097	3,981	3,575	2,448	2,379	2,408	2,571	2,808	3,159	3,747	3,909	3,932	3,251
Total.....	9,975	9,729	9,190	7,875	7,494	7,514	7,726	8,049	8,291	9,169	9,587	9,590	8,682

## THE MINES DIVISION

## PER CAPITA PRODUCTION OF MINES IN THE PROVINCE

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of employed men underground	Tons of coal mined per man employed underground
1906	1,385,000	2,800	494	2,000	692
1907	1,834,745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	688
1909	2,174,329	5,207	417	3,893	566
1910	3,036,757	5,818	504	4,090	742
1911	1,694,564	6,689	253	4,517	375
1912	3,446,349	6,661	517	4,861	708
1913	4,306,346	8,068	533	5,837	737
1914	3,821,739	8,170	467	6,052	631
1915	3,434,891	6,445	532	4,493	764
1916	4,648,604	7,570	614	5,536	839
1917	4,863,414	8,310	595	6,047	804
1918	6,148,620	8,818	697	6,141	1,001
1919	5,022,412	7,573	663	5,150	958
1920	6,908,923	9,688	712	6,551	1,055
1921	5,937,195	10,018	592	7,203	824
1922	5,976,432	8,747	683	6,154	971
1923	6,866,923	9,927	687	7,249	893
1924	5,202,713	7,317	711	5,299	982
1925	5,883,394	8,774	670	6,498	834
1926	6,508,908	8,763	743	6,569	991
1927	6,936,780	9,016	768	6,681	970
1928	7,334,179	9,496	772	6,625	1,107
1929	7,147,250	9,572	747	7,115	1,004
1930	5,755,911	8,889	648	6,607	871
1931	4,563,309	8,070	577	5,969	701
1932	4,867,984	7,837	621	5,772	844
1933	4,714,784	8,042	586	5,937	794
1934	4,748,848	7,863	604	5,809	744
1935	5,462,973	7,800	700	5,644	969
1936	5,696,375	8,110	702	5,940	959
1937	5,551,682	7,836	708	5,806	956
1938	5,230,015	7,411	706	5,427	965
1939	5,518,105	7,456	740	5,517	1,000
1940	6,205,088	7,416	836	5,526	1,122
1941	6,970,064	7,714	903	6,916	1,007
1942	7,754,279	8,040	964	5,865	1,322
1943	7,677,982	8,636	889	6,197	1,160*
1944	7,427,433	8,375	887	6,867	1,135*
1945	7,801,248	8,309	939	5,752	1,298*
1946	8,824,455	8,583	1,028	6,897	1,187*
1947	8,074,596	8,772	920	6,090	1,017*
1948	8,111,013	8,865	915	5,702	946*
1949	8,616,983	8,682	993	5,534	1,025*

\*See Note over page

## PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD

Year	Gross tons of coal mined	Total Average No. of men employed	Tons of coal mined per man employed	Average No. of men employed underground	Tons of coal mined per man employed underground
1910.....	878,011	2,307	380	1,676	524
1911.....	964,700	3,548	271	2,488	391
1912.....	1,341,389	2,980	450	2,283	587
1913.....	1,763,225	4,017	438	2,929	601
1914.....	1,697,401	4,219	402	3,190	532
1915.....	1,682,922	3,181	529	2,210	761
1916.....	2,172,801	4,132	525	3,137	692
1917.....	2,537,829	4,701	539	3,489	727
1918.....	3,035,061	4,896	619	3,420	887
1919.....	2,611,009	4,226	617	2,953	884
1920.....	3,359,309	5,173	647	3,723	902
1921.....	2,943,141	5,601	525	4,256	691
1922.....	3,086,669	4,981	620	3,752	823
1923.....	3,161,741	4,969	636	3,765	812
1924.....	3,096,660	4,543	681	3,447	898
1925.....	3,156,359	4,874	647	3,750	808
1926.....	3,160,029	4,798	658	3,714	816
1927.....	3,357,171	4,663	720	3,603	891
1928.....	3,378,200	4,810	702	3,700	873
1929.....	3,385,749	4,944	685	3,813	880
1930.....	2,874,090	4,822	596	3,756	765
1931.....	2,245,563	4,400	501	3,419	628
1932.....	2,574,785	4,548	566	3,539	728
1933.....	2,434,047	4,480	543	3,487	698
1934.....	2,295,566	4,289	535	3,370	644
1935—Stp. Pit.....	130,084	96	1,355	.....	.....
B. Ground.....	2,517,828	3,927	658	3,058	823
1936—Stp. Pit.....	80,111	107	749	.....	.....
B. Ground.....	2,761,120	4,112	671	3,243	851
1937—Stp. Pit.....	80,116	79	1,014	.....	.....
B. Ground.....	2,551,034	3,148	810	3,162	832
1938—Stp. Pit.....	72,829	74	945	.....	.....
B. Ground.....	2,380,434	3,573	667	2,846	801*
1939—Stp. Pit.....	76,394	73	1,048	.....	.....
B. Ground.....	2,372,805	3,636	653	2,900	818*
1940—Stp. Pit.....	74,021	71	1,042	.....	.....
B. Ground.....	2,463,184	3,556	692	2,844	866*
1941—Stp. Pit.....	88,142	63	1,399	.....	.....
B. Ground.....	2,625,112	3,427	766	2,745	956*
1942—Stp. Pit.....	119,615	67	1,785	.....	.....
B. Ground.....	3,093,498	3,485	888	2,777	1,114*
1943—Stp. Pit.....	137,307	78	1,760	.....	.....
B. Ground.....	3,278,730	4,016	816	3,133	1,046*
1944.....	366,862	263	1,395	.....	.....
B. Ground.....	2,779,939	3,565	882	2,826	984*

\*See note over page.

NOTE: Alberta Coals have been re-classified and Domestic Coal is now included in the new headings "Bituminous" and "Sub-Bituminous".

## THE MINES DIVISION

## PER CAPITA PRODUCTION OF MINES IN THE SUB-BITUMINOUS COAL FIELD

Year	Gross tons of coal mined	Total Average No. of men employed	Tons of coal mined per man employed	Average No. of men employed underground	Tons of coal mined per man employed underground
1922—Stp. Pit	367,514	217	1,693	...	...
B. Ground	267,559	403	664	277	966
1923—Stp. Pit	288,467	190	1,513	...	...
B. Ground	174,994	354	494	260	673
1924—Stp. Pit	369,724	211	1,752	...	...
B. Ground	222,222	393	565	278	799
1925—Stp. Pit	335,993	162	2,074	...	...
B. Ground	245,842	461	533	326	754
1926—Stp. Pit	258,964	147	1,761	...	...
B. Ground	231,407	443	545	305	758
1927—Stp. Pit	304,584	193	1,583	...	...
B. Ground	290,606	478	608	321	905
1928—Stp. Pit	394,682	179	2,205	...	...
B. Ground	345,810	645	536	457	756
1929—Stp. Pit	319,764	163	1,962	...	...
B. Ground	348,344	585	595	402	866
1930—Stp. Pit	304,144	157	1,937	...	...
B. Ground	299,187	569	526	390	767
1931—Stp. Pit	280,201	161	1,803	...	...
B. Ground	191,138	486	393	336	569
1932—Stp. Pit	348,266	177	1,968	...	...
B. Ground	211,213	491	430	341	619
1933—Stp. Pit	309,365	170	1,820	...	...
B. Ground	244,776	516	474	370	661
1934—Stp. Pit	302,054	158	1,912	...	...
B. Ground	235,488	482	489	326	722
1935—Stp. Pit	287,970	180	1,600	...	...
B. Ground	278,466	501	830	337	826
1936—Stp. Pit	263,899	175	1,508	...	...
B. Ground	302,587	532	569	360	841
1937—Stp. Pit	229,747	149	1,542	...	...
B. Ground	276,782	504	549	348	795
1938—Stp. Pit	227,317	148	1,536	...	...
B. Ground	261,595	633	772	327	800
1939—Stp. Pit	246,4.9	142	1,735	...	...
B. Ground	265,646	494	538	320	830
1940—Stp. Pit	318,425	241	1,321	...	...
B. Ground	280,261	393	713	328	854
1941—Stp. Pit	320,801	272	1,179	...	...
B. Ground	264,652	284	689	248	1,069
1942—Stp. Pit	332,748	191	1,742	...	...
B. Ground	400,799	521	769	342	1,172
1943—Stp. Pit	351,890	360	967	...	...
B. Ground	440,062	442	996	399	1,102
1944—Stp. Pit	280,420	161	1,742	...	...
B. Ground	449,007	589	973	386	1,163*
1945—Stp. Pit	833,129	330	2,525	...	...
B. Ground	2,367,376	2,915	812	2,379	991*
1946—Stp. Pit	831,505	316	2,631	...	...
B. Ground	2,603,354	3,066	849	2,513	1,036
1947—Stp. Pit	709,704	339	2,094	...	...
B. Ground	2,527,516	3,183	794	2,859	884
1948—Stp. Pit	1,007,012	385	2,616	...	...
B. Ground	2,183,175	3,010	725	2,444	893
1949—Stp. Pit	1,027,493	432	2,378	...	...
B. Ground	2,094,163	2,819	743	2,297	912

\*See Note.

## BITUMINOUS COAL FIELD

Year	Gross tons of coal mined	Total Average No. of men employed	Tons of coal mined per man employed	Average No. of men employed underground	Tons of coal mined per man employed underground
1910.....	1,896,961	2,981	636	2,076	914
1911.....	649,745	2,645	246	1,820	357
1912.....	1,926,371	3,243	594	2,353	818
1913.....	2,374,401	3,562	666	2,645	897
1914.....	1,953,367	3,529	553	2,632	742
1915.....	1,626,237	2,921	557	2,103	773
1916.....	2,335,259	3,142	743	2,258	1,034
1917.....	2,206,868	3,335	661	2,429	909
1918.....	2,982,334	3,636	820	2,597	1,109
1919.....	2,325,787	3,118	745	2,100	1,108
1920.....	3,419,021	4,228	809	2,711	1,202
1921.....	2,897,380	4,133	701	2,820	1,026
1922.....	2,214,273	3,034	730	2,084	1,062
1923.....	3,241,614	4,345	746	3,215	1,008
1924.....	1,515,107	2,171	698	1,574	966
1925.....	2,145,200	3,277	654	2,422	885
1926.....	2,858,508	3,375	847	2,550	1,121
1927.....	2,984,419	3,682	810	2,757	1,082
1928.....	3,215,481	3,862	832	2,468	1,302
1929.....	3,093,393	3,880	797	2,898	1,077
1930.....	2,278,490	3,341	682	2,461	926
1931.....	1,846,357	3,023	611	2,214	834
1932.....	1,733,720	2,621	660	1,892	916
1933.....	1,726,596	2,876	600	2,080	830
1934.....	1,915,740	2,934	653	2,113	907
1935.....	2,248,625	3,096	726	2,248	1,000
1936.....	2,288,658	3,184	719	2,337	979
1937.....	2,414,003	3,156	765	2,295	1,052
1938.....	2,287,840	3,131	731	2,254	1,015
1939.....	2,556,801	3,111	822	2,297	1,113
1940.....	3,069,197	3,155	972	2,354	1,303
1941.....	3,671,357	3,568	1,029	2,659	1,381
1942.....	3,807,619	3,766	1,008	2,746	1,387
1943.....	3,469,993	3,740	927	2,665	1,302
1944—Stp. Pit.....	119,092	35	3,403	.....	.....
B. Ground.....	3,432,113	3,762	935	2,655	1,293
1945—Stp. Pit.....	491,736	209	2,364	.....	.....
B. Ground.....	4,109,027	4,825	852	3,373	1,218
1946—Stp. Pit.....	991,335	332	2,986	.....	.....
B. Ground.....	4,398,261	4,869	903	3,384	1,300
1947—Stp. Pit.....	1,170,875	405	2,891	.....	.....
B. Ground.....	3,666,501	4,845	757	3,231	1,135
1948—Stp. Pit.....	1,709,039	552	3,096	.....	.....
B. Ground.....	3,211,757	4,918	653	3,258	986
1949—Stp. Pit.....	1,914,463	630	3,039	.....	.....
B. Ground.....	3,580,864	4,801	746	3,237	1,106

## ANTHRACITE COAL FIELD

1910.....	261,765	530	493	338	774
1911.....	80,119	500	160	209	383
1912.....	178,589	438	407	225	793
1913.....	168,720	489	345	263	641
1914.....	170,971	422	405	230	743
1915.....	125,732	343	366	180	698
1916.....	140,544	296	474	141	996
1917.....	118,717	284	418	129	920
1918.....	131,225	286	458	124	1,058
1919.....	85,616	229	374	95	901
1920.....	130,594	287	455	117	1,116
1921.....	96,674	284	341	127	761
1922.....	40,417	112	361	41	986
1923.....	107	69	1	9	12

NOTE: The table showing the number of men employed in the Anthracite Coal Field includes employees at the briquetting plant. There has been no Anthracite Coal produced since 1923.

\*Calculating the total per capita production for men employed underground, the tonnage mined from stripping pits was deducted and only the tonnage produced from the mines was used.

It will also be noted the tonnage used in the above and following tables does not include tonnage extracted under Permit.

NOTE: Previous to 1944 there was no coal mined in the Bituminous Field by stripping methods.

PER CAPITA PRODUCTION OF MINES BY AREAS  
BITUMINOUS COAL FIELD

SUB-BITUMINOUS FIELD

Group 4:		Group 5:													
		16	1,160	2,977	6,24	17,402	12	1,450	2,350	7,41	1,163	4	290	627	1,85
Ardley.....	18,565	28	984	4,921	5,60	21,109	13	1,624	2,554	8,27	6,441	15	429	2,367	2.72
Big Valley.....	27,550	67	1,788	16,139	7,42	11,815	67	1,788	16,139	7,42	6,441	15	429	2,367	2.72
Brooks.....	119,815	619	16,684	3,42	11,478	.....	9,57	2,297	5,00	45,484	80	569	4,367	10,42	
Carbon.....	56,962	92	458	2,241	2,66	.....	4,122	642	6,99	5,950	13	458	2,241	2,66	
Champion.....	1,608,598	2,097	767	432,299	3,71	4,489	4	3,527	8,026	17,58	604,109	2,093	766	432,657	3,71
Dundheller.....	473,767	987	97,595	4,85	141,077	40	.....	.....	.....	.....	440	756	89,569	371	
Edmonton.....	1,320,1	33	400	6,339	2,08	.....	.....	.....	.....	13,201	33	400	6,339	2,08	
Gleichen.....	13,201	3	434	273	4,77	.....	.....	.....	.....	1,302	3	434	273	4,77	
Milk River.....	1,302	71	2,541	15,144	11,91	177,954	66	2,696	14,198	12,53	2,428	5	486	946	2,57
Pembina.....	180,382	72	3,278	8,973	15,34	130,650	32	4,083	7,199	18,15	6,979	10	698	1,774	393
Taber.....	137,629	42	3,470	625	2,26	.....	.....	.....	.....	1,411	3	470	625	2,26	
Wetaskiwin.....	1,411	3	229	126	3,64	421	1	421	87	4,84	38	1	38	39	.97
Whitecourt.....	459	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 5:															
Camrose.....	76,223	73	1,044	14,671	5,20	53,789	31	1,735	8,208	6,55	22,434	42	534	6,463	3,47
Castor.....	127,397	102	1,249	23,521	5,42	91,787	51	1,800	10,946	8,39	35,610	51	698	12,575	2,83
Fakowi.....	1,448	1	448	99	4,53	.....	.....	.....	.....	448	1	448	99	4,53	
Reelift.....	1,1,518	18	640	3,953	2,91	3,352	3	1,117	415	8,08	8,166	15	544	3,538	2,31
Rocheater.....	520	1	520	154	3,38	520	1	520	154	3,38	5,611	10,03	416	208	219
Sherness.....	56,684	26	2,180	5,830	9,72	56,268	24	2,346	5,75	1,21	3,57	2	208	219	1,90
Slave.....	75	1	75	2,21	3,57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tofield.....	193,503	73	2,651	16,927	11,43	187,610	65	2,886	15,813	11,86	5,893	8	737	1,114	5,29
Westlock.....	9,697	9	1,077	2,062	4,70	9,697	9	1,077	2,062	4,70	.....	.....	.....	.....	.....
Total.....	3,121,656	3,251	960	672,554	4,64	1,027,493	432	2,378	97,122	10,58	2,094,163	743	575,432	3,64	

## SUMMARY

Bituminous.....	5,495,327	5,431	1,012	1,238,368	4,44	1,914,463	630	3,039	169,113	11,32	3,580,864	4,801	746	1,069,255	3,35
Sub-bituminous.....	3,121,656	3,251	960	672,554	4,64	1,027,483	432	2,378	97,122	10,58	2,094,163	2,819	743	575,432	3,64
Total.....	8,616,983	8,682	993	1,910,922	4,51	2,941,956	1,062	2,770	266,235	11,05	5,675,027	7,620	745	1,644,687	3,45

## THE MINE'S DIVISION

Number of days on which Coal was drawn in the BITUMINOUS FIELD by areas during each month

Number of days on which Coal was drawn in the SUB-BITUMINOUS FIELD by areas during each month

Group 4:													
Ardley	18.8	17.8	14.1	8.0	8.0	7.0	13.0	8.0	17.0	19.3	16.3	20.6	167.9
Big Valley	22.0	22.0	18.5	14.5	16.0	.....	20.0	11.0	22.0	26.0	25.5	25.5	223.0
Brooks	15.0	15.0	4.0	.....	.....	.....	5.0	6.0	12.0	26.0	24.0	19.0	133.0
Carbon	16.7	16.4	9.0	6.7	8.0	11.0	11.4	15.1	20.1	18.9	18.5	14.5	166.3
Champion	21.0	15.7	10.3	6.3	7.3	11.0	13.5	18.5	21.3	21.0	21.0	14.7	175.1
Druntheller	18.7	18.8	14.9	6.9	10.2	13.0	10.6	20.0	21.2	20.1	21.2	20.0	195.6
Edmonton	20.3	18.9	11.6	9.1	12.9	12.6	12.6	16.2	18.8	19.5	20.3	19.9	193.7
Gleichen	23.5	21.3	17.5	10.0	9.3	19.0	15.3	23.7	22.7	23.5	22.0	20.0	227.8
Milk River	15.0	18.0	18.0	8.0	15.0	12.0	20.0	22.0	18.0	20.0	23.0	10.0	199.0
Pembina	19.0	19.6	13.6	13.7	15.5	13.6	10.6	14.7	16.5	18.6	21.0	19.5	195.1
Taber	14.7	14.7	11.7	5.5	7.0	12.5	9.0	17.5	21.7	15.4	17.5	13.3	160.5
Weaskiw	21.0	20.0	15.0	10.0	.....	.....	10.0	15.0	21.0	21.0	20.0	20.0	153.0
Whitecourt	6.0	.....	.....	.....	.....	.....	3.0	.....	.....	22.0	22.0	13.3	44.3
Group 5:													
Caribou	18.5	11.3	14.0	16.5	19.5	13.0	14.7	21.8	19.6	17.6	200.5	17.2	171.2
Castor	18.5	12.4	10.8	10.0	11.4	9.1	11.6	14.6	14.6	18.8	19.4	17.2	181.0
Pakowki	26.0	20.0	20.0	2.0	.....	.....	3.0	8.0	22.0	21.0	17.0	10.0	181.5
Redcliff	21.5	21.8	8.0	6.5	4.7	12.0	11.8	27.0	27.0	26.0	19.5	25.0	18.0
Rochester	15.0	3.0	17.5	11.4	13.8	11.6	15.3	10.4	14.6	21.4	21.1	18.6	43.0
Sherness	21.2	17.4	14.0	2.0	3.0	5.0	5.0	5.5	5.5	23.2	18.8	18.0	181.1
Slave	22.0	22.3	17.0	17.0	14.0	11.4	15.3	10.4	14.6	19.3	23.7	19.0	190.3
Tofield	381.4	340.1	230.4	146.9	159.0	163.9	228.4	271.2	331.4	401.1	437.0	363.2	153.1
Total	381.4	340.1	230.4	146.9	159.0	159.0	159.0	163.9	163.9	167.1	641.2	553.0	183.0
Bituminous		253.1	245.3	216.1	142.5	159.0	183.3	148.4	203.0	206.0	204.2	189.8	2,351.6
Sub Bituminous		381.4	340.1	230.4	146.9	146.9	159.0	228.4	271.2	401.1	437.0	363.2	3,454.0
Total	634.5	585.4	446.5	289.4	318.0	347.2	376.8	474.2	532.3	607.1	641.2	553.0	5,805.6
													183.0

184.4

## THE MINES DIVISION

Total number of shifts worked above and below ground by areas during each month, for the six months ending June 30, 1949

## BITUMINOUS FIELD

Areas	January		February		March		April		May		June		Total January to June	
	Above Grd.	Below Grd.	Above Grd.	Below Grd.										
Group 1:														
Cascade.....	3,134	3,825	2,641	3,394	3,004	3,862	2,816	3,562	3,034	3,545	5,328	3,823	19,967	22,011
Nordberg.....	3,756	4,581	2,654	3,914	2,835	4,276	2,593	4,273	2,521	3,793	2,785	4,437	17,144	25,268
Highwood.....	610	599	96	117	.....	.....	.....	.....	.....	.....	.....	.....	706	716
Group 2:														
Crowsnest.....	18,331	30,133	15,634	25,449	18,386	32,561	16,330	28,582	16,042	27,171	16,959	29,019	101,682	172,915
Mountain Park.....	11,181	8,964	9,520	8,228	11,196	9,601	10,123	6,112	11,354	5,496	11,364	4,919	64,738	43,320
Group 3:														
Coalspur.....	8,350	6,877	7,803	6,344	8,947	7,073	7,887	5,017	7,625	5,457	7,408	5,779	48,020	36,547
Halcourt.....	25	5	.....	23	23	25	23	25	5	5	24	24	82	82
Lethbridge.....	3,532	10,630	3,402	10,329	2,518	5,968	1,676	1,947	1,932	3,755	2,279	4,760	15,339	37,389
Morley.....	40	40	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Pekisko.....	20	120	20	140	20	140	15	120	20	140	20	140	20	800
Pincher.....	80	.....	66	.....	66	.....	66	.....	66	.....	40	.....	20	338
Prairie Creek.....	14	26	50	106	24	54	.....	.....	.....	.....	.....	.....	88	186
Saunders.....	848	2,110	819	2,025	620	1,361	335	599	573	948	675	990	3,870	8,033
No Area.....	5	10	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	28	.....
Total.....	49,781	68,010	42,649	60,145	47,563	64,979	41,775	50,278	43,101	50,350	46,828	53,911	271,697	347,673

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Total number of shifts worked above and below ground by areas during each month for the six months ending December 31, 1949

## BITUMINOUS FIELD

Areas	July		August		September		October		November		December		Total July to Dec.		Total for Year 1949	
	Above Grd.	Below Grd.	Above Grd.	Below Grd.	Above Grd.	Below Grd.										
Group 1:																
Cascade.....	2,284	1,958	3,605	4,079	3,278	3,717	3,464	3,901	3,444	4,296	3,079	4,072	19,154	22,023	39,121	44,034
Highwood.....	2,512	3,515	2,862	4,470	2,345	5,164	2,852	4,641	3,358	5,269	3,303	4,712	17,234	27,771	23,231	1,003
Nordegg.....																947
Group 2:																53,039
Crownest.....	17,135	26,220	17,138	27,133	16,376	26,547	17,468	29,187	19,113	28,523	16,701	24,396	103,931	162,006	205,613	334,921
Mountain Park.....	10,141	4,157	10,883	4,919	10,702	4,732	10,812	4,936	11,263	5,928	10,174	5,127	63,975	29,859	128,713	73,179
Group 3:																
Calspur.....	6,154	4,637	8,352	6,244	7,939	6,308	8,126	6,819	9,010	7,478	8,390	6,882	47,971	38,366	95,991	74,915
Halcourt.....		20		19		20		20		16		28		123		205
Lebbridge.....	2,307	5,575	3,155	8,333	4,221	8,508	3,381	8,641	3,700	10,051	3,652	10,063	20,416	51,191	35,755	88,580
Morley.....																68
Pekisko.....	20	140	46	207	20	160	20	160	14	112	10	80	130	859	245	1,659
Pincher.....																
Prairie Creek.....																796
Saunders.....	515	758	782	1,345	747	1,190	780	1,387	903	1,809	791	1,908	4,518	8,397	8,388	186
No Area.....																16,430
Total.....	41,068	46,980	46,823	56,861	45,628	56,498	46,903	59,788	50,805	63,580	46,485	57,579	277,712	341,286	549,409	688,959

## THE MINES DIVISION

Total number of shifts worked above and below ground by areas during each month for the six months ending June 30, 1949

## SUB-BITUMINOUS FIELD

Areas	January		February		March		April		May		June		Total January to June	
	Above Grd.	Below Grd.	Above Grd.	Below Grd.										
Group 4:														
Archie	320	110	354	72	266	49	5	22	16	22	945	291		
Big Valley	131	552	128	569	66	279	61	74	61	.....	437	1,535		
Brooks	2,164	2,025	1,913	1,422	928	357	1,067	119	238	.....	5,005	2,185		
Carbon	764	2,025	599	1,422	305	60	181	111	277	354	288	5,394		
Champion	24	37,778	8,835	36,129	7,890	29,440	4,953	14,765	8	69	105	2,177		
Drumheller	9,383	37,778	9,836	1,700	4,385	634	1,777	1,141	18,809	6,662	22,967	43,914	159,988	
Edmonton	3,232	10,780	3,009	853	431	21	180	4	2,264	1,048	2,615	10,764	31,657	
Gleichen	59	967	57	18	36	18	36	10	107	41	217	221	2,755	
Milk River	15	190	1,409	1,444	1,366	8	743	10	15	15	12	36	124	
Pembina	935	178	713	227	346	111	111	48	1,202	630	7,246	342		
Taber	.....	105	.....	60	.....	45	.....	45	64	79	1,994	707		
Wetaskiwin	12	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	230		
Whitecourt	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12		
Group 5:														
Canmore	423	819	1,511	836	483	249	326	82	390	43	437	303	3,570	2,332
Castor	1,468	2,046	1,723	1,762	212	379	127	76	53	53	1,084	118	4,614	4,434
Pakowki	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400	754
Bedcliff	224	445	172	293	.....	.....	4	16	.....	.....	.....	.....	.....	
Rochester	362	38	618	42	490	22	315	7	280	5	314	5	2,579	119
Sheerness	16	6	1,681	120	1,397	40	1,156	35	753	32	706	39	7,732	414
Slave	2,039	148	322	322	207	34	34	26	26	5	929	929	.....	
Westlock	335	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Total	23,986	56,669	23,092	52,706	15,825	36,722	8,509	17,457	10,323	21,899	10,996	26,770	92,731	212,223

## SUMMARY

Bituminous	49,781	68,010	42,649	60,145	47,563	64,979	41,775	50,278	43,101	50,350	46,828	53,911	271,697	347,673
Sub Bituminous	23,986	56,669	23,092	52,706	15,825	36,722	8,509	17,457	10,323	21,899	10,996	26,770	92,731	212,223
Total	73,767	124,679	65,741	112,851	63,388	101,701	50,284	67,735	53,424	72,249	57,824	80,681	364,428	559,896

SUB-BITUMINOUS FIELD

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Areas	July		August		September		October		November		December		Total July to Dec.		Total for year	
	Above Grd.	Below Grd.	Above Grd.	Below Grd.	Above Grd.	Below Grd.										
Group 4:																
Ardeley	32	50	60	76	313	96	529	80	434	58	1,352	389	2,297	680		
Big Valley	95	50	480	1,710	922	2,418	2,513	1,972	451	1,976	2,673	2,276	3,110	1,811		
Brooks	1,000	521	1,521	789	381	694	1,309	771	204	1,476	673	943	11,134	16,139		
Carbon	70	472	79	95	22	251	22	246	15	165	61	3,353	5,732	5,538	11,538	
Champion	5,837	17,831	8,438	30,180	8,556	30,857	8,516	31,639	8,694	34,164	9,296	35,369	49,357	180,040	2,053	
Dunmeller	1,178	2,543	1,514	3,994	2,016	5,673	2,859	8,900	3,116	10,336	3,195	9,850	13,878	41,296	340,028	
Edmonton	18	195	70	336	63	287	73	635	77	745	72	792	7373	2,990	24,642	72,953
Gleichen																5,745
Milk River	20	884	22	975	176	1,312	209	1,201	121	1,809	23	10	113	36	237	
Penbina	12	87	155	528	195	1,601	231	1,476	205	1,624	170	5,229	68	588	14,214	930
Taher			20	45	105	105	105	105	105	105	120	120	120	120	7,223	1,750
Weaskiwinn																625
Whitecourt			9													39
Group 5:																
Caronos	809	87	922	439	994	388	1,022	646	1,053	843	906	660	5,706	3,063	9,276	5,395
Castor	489	100	470	242	841	1,128	1,362	1,939	1,539	2,199	2,092	6,793	6,793	12,114		
Pakowki		3		16	22	22	21	17	17	20	20	99	99	99	1,415	
Redcliff		52	270	425	425	222	345	295	193	203	99	54	1,384	1,384	1,815	2,138
Rochester																1,54
Sherness	76	5	147	4	542	4	746	30	839	20	693	30	3,043	89	5,622	208
Slave																
Tofield	658	32	722	36	1,066	53	2,114	181	1,854	180	1,706	179	8,120	661	15,852	21
Westlock	5	10		91			275	352	400	400	400	400	1,133	1,133	2,062	1,075
Total	11,197	21,694	15,490	36,720	18,744	40,224	24,548	46,557	25,190	50,953	25,648	50,635	120,817	246,783	213,548	459,006

SUMMARY

Bituminous	41,068	46,980	46,823	56,861	45,628	56,498	46,903	59,788	50,805	63,580	46,485	57,579	277,712	341,286	688,959
Sub Bituminous	11,197	21,694	15,490	36,720	18,744	40,224	24,548	46,557	25,190	50,953	25,648	50,635	120,817	246,783	213,548
Total	52,265	68,674	62,313	93,581	64,372	96,722	71,451	106,345	75,995	114,533	72,133	108,214	398,529	588,069	1,147,965

## THE MINES DIVISION

## PRODUCTION OF COAL PER EIGHT-HOUR MAN-SHIFT

Year	Gross tons of coal mined	Total No. of Eight-hour Man- shifts	Average No. of Tons of Coal Mined per Eight- hour Shift
1927.....	6,936,780	2,196,712	3.157
1928.....	7,334,179	2,282,098	3.213
1929.....	7,147,250	2,261,064	3.161
1930.....	5,755,911	1,823,826	3.155
1931.....	4,563,309	1,396,696	3.267
1932.....	4,867,984	1,475,813	3.299
1933.....	4,714,784	1,440,985	3.271
1934.....	4,748,848	1,342,086	3.538
1935.....	5,462,973	1,614,032	3.384
1936.....	5,696,375	1,696,998	3.356
1937.....	5,551,682	1,620,003	3.426
1938.....	5,230,015	1,498,855	3.489
1939.....	5,518,105	1,549,042	3.562
1940.....	6,205,088	1,673,948	3.706
1941.....	6,970,064	1,877,968	3.711
1942.....	7,754,279	2,229,655	3.477
1943.....	7,677,982	2,200,426	3.489
1944.....	7,427,433	2,034,155	3.651
1945.....	7,801,248	1,990,452	3.919
1946.....	8,821,455	2,105,511	4.191
1947.....	8,074,596	1,998,002	4.041
1948.....	8,111,013	1,894,837	4.280
1949.....	8,616,983	1,910,922	4.510

AMOUNT OF TIMBER USED DURING THE YEAR  
BITUMINOUS COAL FIELD

Areas	Timber lineal feet	Lumber B.M. feet	Ties lineal feet	Slabs lineal feet	Lagging lineal feet
Group 1:					
Cascade.....	391,775	12,000	67,266	.....	34,535
Highwood.....	4,478	2,900	366	250	7,680
Nordegg.....	704,629	.....	.....	.....	.....
Group 2:					
Crowsnest.....	4,064,664	2,315,947	58,183	15,850	2,624,468
Mountain Park.....	303,863	446,444	7,360	10,352	833,298
Group 3:					
Coalspur.....	293,189	458,092	3,816	.....	154,500
Halcourt.....	500	.....	.....	.....	100
Lethbridge.....	1,275,616	49,897	74,947	270	443,492
Pekisko.....	20,000	7,000	4,000	.....	3,000
Pincher.....	1,500	.....	.....	.....	300
Prairie Creek.....	400	1,000	.....	.....	1,000
Saunders.....	214,060	4,000	30,732	.....	46,784
Total.....	7,274,674	3,297,280	246,670	26,722	4,149,157

SUB-BITUMINOUS COAL FIELD

Group 4:					
Ardley.....	9,289	.....	400	.....	100
Big Valley.....	15,345	20,800	300	.....	2,500
Carbon.....	113,976	12,438	5,616	.....	18,825
Champion.....	24,404	1,500	1,100	50	5,700
Drumheller.....	7,063,539	400,098	320,678	1,000	117,500
Edmonton.....	1,343,226	21,188	105,270	200	159,172
Gleichen.....	45,103	10,580	1,867	.....	27,582
Milk River.....	9,000	.....	1,000	.....	.....
Pembina.....	19,800	2,500	2,000	.....	16,000
Taber.....	29,200	50,000	5,550	.....	16,000
Wetaskiwin.....	429,600	.....	4,000	.....	.....
Whitecourt.....	328	100	.....	.....	50
Group 5:					
Camrose.....	85,000	37,500	.....	.....	.....
Castor.....	156,244	14,300	12,800	.....	18,500
Pakowki.....	2,400	1,000	600	.....	700
Redcliff.....	4,000	2,000	2,000	.....	.....
Sheerness.....	1,200	13,812	2,380	.....	.....
Slave.....	1,100	2,000	.....	.....	.....
Tofield.....	17,120	32,240	5,800	.....	.....
Total.....	9,369,874	622,056	471,361	1,250	382,629

PARTICULARS OF LAMPS IN THE BITUMINOUS AND SUB-BITUMINOUS COAL  
FIELDS DURING THE YEARS 1948 AND 1949

BITUMINOUS

	1948	1949
Portable Electric Lamps, Edison Cap Type.....	3,985	4,027
Wolfe Flame Type.....	373	368
Total.....	4,358	4,395

SUB-BITUMINOUS

Portable Electric Lamps, Edison Cap Type.....	1,971	1,978
Koehler Flame Type.....	16	15
Wolfe Flame Type.....	201	195
Total.....	2,188	2,188

## THE MINES DIVISION

## QUANTITY OF EXPLOSIVES USED IN POUNDS FOR BLASTING COAL

## BITUMINOUS COAL FIELD

Areas	Name of Explosives					
	Pellet	Monobel	C.X.L-ite	Cardox	Forcite	Total
Group 1:						
Cascade.....		38,950	.....	.....	.....	38,950
Highwood.....		405	.....	.....	.....	405
Group 5:						
Crowsnest.....	50	87,116	7,390	1,292	.....	95,848
Mountain Park.....		61,972	5,921	.....	61,500	129,393
Group 3:						
Coalspur.....	121,517	.....	2,500	.....	92,250	216,267
Lethbridge.....	2,475	42,941	200	51,250	.....	96,866
Pekisko.....	2,800	2,000	.....	.....	.....	4,800
Pincher.....	.....	200	.....	.....	.....	200
Prairie Creek.....	.....	300	.....	.....	.....	300
Saunders.....	3,250	7,223	500	.....	.....	10,973
Total.....	130,092	241,107	16,511	52,542	153,750	594,002

## SUB-BITUMINOUS COAL FIELD

Group 4:						
Ardley.....	3,250	26	.....	.....	.....	3,276
Big Valley.....	2,210	350	.....	.....	.....	2,560
Brooks.....	5,350	950	5,225	.....	.....	11,525
Carbon.....	8,962	1,240	.....	.....	.....	10,202
Champion.....	1,590	.....	.....	.....	.....	1,590
Drumheller.....	72,215	103,263	850	109,120	150	285,598
Edmonton.....	1,000	40,723	300	.....	.....	42,023
Gleichen.....	4,440	325	.....	.....	.....	4,765
Milk River.....	400	.....	.....	.....	.....	400
Pembina.....	400	2,845	.....	.....	.....	3,245
Taber.....	1,350	12,010	.....	.....	.....	13,360
Wetaskiwin.....	450	150	.....	.....	.....	600
Whitecourt.....	.....	50	.....	.....	.....	50
Group 5:						
Camrose.....	.....	3,750	50	.....	.....	3,800
Castor.....	15,600	633	.....	.....	.....	16,233
Pakowki.....	.....	30	.....	.....	.....	30
Redcliff.....	6,000	.....	.....	.....	.....	6,000
Sheerness.....	1,556	7	.....	.....	.....	1,563
Slave.....	.....	50	.....	.....	.....	50
Tofield.....	14,750	1,000	.....	.....	5,500	21,250
Westlock.....	450	138	.....	.....	.....	588
Total.....	139,973	167,540	6,425	109,120	5,650	428,708

Number of tons of Coal produced per pound of Explosives used for blasting coal

## BITUMINOUS COAL FIELD

Areas	Number of tons of coal mined	Number of lbs. of Explosives used	Tons of coal mined per lb. of explosives used
<b>Group 1:</b>			
Cascade.....	304,743	38,950	7.82
Highwood.....	2,958	405	7.30
Nordegg.....	338,280	.....	.....
<b>Group 2:</b>			
Crowsnest.....	2,465,426	95,848	25.72
Mountain Park.....	1,128,903	129,393	8.72
<b>Group 3:</b>			
Coalspur.....	810,675	216,267	3.75
Halcourt.....	282	.....	.....
Lethbridge.....	384,431	96,866	3.97
Morley.....	140	.....	.....
Pekisko.....	7,057	4,800	1.47
Pincher.....	870	200	4.35
Prairie Creek.....	321	300	1.07
Saunders.....	50,961	10,973	4.64
No Area.....	280	.....	.....
<b>Total.....</b>	<b>5,495,327</b>	<b>594,002</b>	<b>9.25</b>

## SUB-BITUMINOUS COAL FIELD

<b>Group 4:</b>			
Ardley.....	3,134	3,276	.96
Big Valley.....	27,550	2,560	10.76
Brooks.....	119,815	11,525	10.40
Carbon.....	56,962	10,202	5.58
Champion.....	5,950	1,590	3.74
Drumheller.....	1,608,589	285,598	5.63
Edmonton.....	473,767	42,023	11.27
Gleichen.....	13,201	4,765	2.77
Milk River.....	1,302	400	3.26
Pembina.....	180,382	3,245	5.56
Taber.....	137,629	13,360	10.30
Wetaskiwin.....	1,411	600	2.35
Whitecourt.....	459	50	9.18
<b>Group 5:</b>			
Camrose.....	76,222	3,800	20.06
Castor.....	127,397	16,233	7.85
Pakowki.....	448	30	14.93
Redcliff.....	11,518	6,000	1.92
Rochester.....	520	.....	.....
Sheerness.....	56,684	1,563	36.27
Slave.....	75	50	1.50
Tofield.....	193,503	21,250	9.11
Westlock.....	9,697	588	16.49
<b>Total.....</b>	<b>3,121,656</b>	<b>428,708</b>	<b>7.28</b>

## THE MINES DIVISION

## Estimated number of shots fired for Blasting Coal

## BITUMINOUS COAL FIELD

Areas	Electric Detonators	Electric Squibs	Cardox Heaters	Total
Group 1:				
Cascade.....	70,000	.....	.....	70,000
Highwood.....	450	.....	.....	450
Group 2:				
Crowsnest.....	73,741	.....	1,292	75,033
Mountain Park.....	47,324	.....	.....	47,324
Group 3:				
Coalspur.....	104,990	.....	.....	104,990
Lethbridge.....	65,499	1,780	15,376	82,655
Pekisko.....	5,500	.....	.....	5,500
Pincher.....	450	.....	.....	450
Prairie Creek.....	300	.....	.....	300
Saunders.....	16,364	.....	.....	16,364
Total.....	384,618	1,780	16,668	403,066

## SUB-BITUMINOUS COAL FIELD

Group 4:				
Ardley.....	1,322	2,594	.....	3,916
Big Valley.....	3,602	300	.....	3,902
Brooks.....	6,025	3,050	.....	9,075
Carbon.....	5,100	7,699	.....	12,799
Champion.....	.....	2,331	.....	2,331
Drumheller.....	258,001	30,115	17,600	305,716
Edmonton.....	59,184	75	.....	59,259
Gleichen.....	430	4,221	.....	4,651
Milk River.....	.....	300	.....	300
Pembina.....	3,309	20	.....	3,329
Taber.....	1,456	14,150	.....	15,606
Wetaskiwin.....	250	400	.....	650
Whitecourt.....	40	.....	.....	40
Group 5:				
Camrose.....	4,465	.....	.....	4,465
Castor.....	2,555	12,478	.....	15,033
Pakowki.....	125	.....	.....	125
Redcliff.....	.....	5,000	.....	5,000
Sheerness.....	421	692	.....	1,113
Slave.....	75	.....	.....	75
Tofield.....	22,450	4,055	.....	26,505
Westlock.....	518	.....	.....	518
Total.....	369,328	87,480	17,600	474,408

Number of miss-fire shots recorded in blasting coal in the Province

## BITUMINOUS COAL FIELD

Areas	Electric Detonators	Electric Squibs	Cardox Heaters	Total
Group 1:				
Cascade.....	5	.....	.....	5
Group 2:				
Crowsnest.....	4	.....	.....	4
Group 3:				
Coalspur.....	5	.....	.....	5
Lethbridge.....	2	5	242	249
Pekisko.....	4	.....	.....	4
Saunders.....	2	.....	.....	2
Total.....	22	5	242	269

## SUB-BITUMINOUS COAL FIELD

Group 4:				
Ardley.....	.....	3	.....	3
Big Valley.....	1	.....	.....	1
Brooks.....	3	.....	.....	3
Carbon.....	.....	16	.....	16
Champion.....	.....	17	.....	17
Drumheller.....	38	8	82	128
Edmonton.....	13	.....	.....	13
Gleichen.....	.....	5	.....	5
Pembina.....	.....	5	.....	5
Taber.....	36	.....	.....	36
Group 5:				
Castor.....	2	10	.....	12
Sheerness.....	1	1	.....	2
Tofield.....	1	17	.....	18
Total.....	95	82	82	259

## THE MINES DIVISION

Quantity of Explosives used in pounds for Blasting Rock in Coal-mines in the Province

## BITUMINOUS COAL FIELD

Areas	Pellets	Monobel	C.X.L-ite	Forcite	Total
<b>Group 1:</b>					
Cascade.....	.....	.....	3,300	150	3,450
Nordegg.....	.....	1,025	473	.....	1,498
<b>Group 2:</b>					
Crowsnest.....	.....	.....	13,140	87,288	90,428
Mountain Park.....	.....	750	3,779	505,816	510,345
<b>Group 3:</b>					
Coalspur.....	.....	150	.....	66,670	66,820
Halcourt.....	.....	25	.....	.....	25
Lethbridge.....	150	50	250	.....	450
Pekisko.....	.....	150	.....	.....	150
Saunders.....	.....	900	.....	.....	900
<b>Total.....</b>	<b>150</b>	<b>3,050</b>	<b>20,942</b>	<b>669,924</b>	<b>674,066</b>

## SUB-BITUMINOUS COAL FIELD

<b>Group 4:</b>					
Ardley.....	.....	113	.....	.....	113
Brooks.....	.....	.....	2,750	8,200	10,950
Drumheller.....	46	1,576	18,370	1,500	21,492
Edmonton.....	.....	612	.....	.....	612
Gleichen.....	30	210	.....	.....	240
Taber.....	.....	150	.....	.....	150
Whitecourt.....	25	.....	.....	.....	25
<b>Group 5:</b>					
Castor.....	.....	200	100	.....	300
Sheerness.....	35	.....	221	.....	256
<b>Total.....</b>	<b>136</b>	<b>2,861</b>	<b>21,441</b>	<b>9,700</b>	<b>34,138</b>

## Estimated number of shots fired for Blasting Rock in Coal-mines in the Province

## BITUMINOUS COAL FIELD

Areas	Electric Detonators	Electric Squibs	Total
Group 1:			
Cascade.....	3,442	.....	3,442
Nordegg.....	1,743	.....	1,743
Group 2:			
Crowsnest.....	16,718	.....	16,718
Mountain Park.....	44,325	.....	44,325
Group 3:			
Coalspur.....	16,165	.....	16,165
Halcourt.....	30	.....	30
Lethbridge.....	160	175	335
Pekisko.....	75	.....	75
Saunders.....	1,200	.....	1,200
Total.....	83,858	175	84,033

## SUB-BITUMINOUS COAL FIELD

Group 4:			
Ardley.....	120	.....	120
Brooks.....	220	.....	220
Drumheller.....	30,854	150	31,004
Edmonton.....	815	.....	815
Gleichen.....	412	96	508
Taber.....	200	.....	200
Whitecourt.....	20	.....	20
Group 5:			
Castor.....	379	.....	379
Sheerness.....	177	10	187
Total.....	33,197	256	33,453

## Number of miss-fire shots recorded in Blasting Rock in Coal-mines in the Province

Ardley.....	1	.....	1
Coalspur.....	15	.....	15
Crowsnest.....	1	.....	1
Drumheller.....	3	.....	3
Nordegg.....	107	.....	107
Total.....	127	.....	127

## ELECTRICITY

The rules for the installation and use of electricity in or about mines, require a return to be made to the Department on or before January 15th of each year, giving size, type and any other particulars which may be required of electrical apparatus in use above and below ground. According to the returns received from the different mines, electricity was used in 92 mines in 1949. A summary of these returns regarding the horse-power of electrical apparatus in use is given below.

Areas	No. of Mines using Electricity	Horse-power of electrical apparatus in use		Total Horse-power	Purchased power
		Above Ground	Below Ground		
Big Valley.....	1	16	.....	16	34,240
Brooks.....	1	80	.....	80	64,320
Camrose.....	2	127	35	162	77,900
Carbon.....	6	176	217	393	111,303
Cascade .....	2	2,803	201	3,004	4,188,800
Castor.....	5	134	88	222	.....
Coalspur.....	5	2,168	1,220	3,388	.....
Crowsnest.....	6	21,504	4,078	25,582	29,242,200
Drumheller.....	20	4,442	8,622	13,064	8,613,931
Edmonton.....	17	1,106	1,647	2,753	1,237,038
Gleichen.....	1	5	32	37	31,033
Highwood.....	1	40	.....	40	.....
Lethbridge.....	4	2,222	2,109	4,331	3,148,267
Mountain Park.....	5	4,103	375	4,478	.....
Nordegg.....	2	2,865	339	3,204	6,384,150
Pekisko.....	2	26	1	27	.....
Pembina.....	1	52	.....	52	.....
Redcliff.....	1	70	31	101	90,000
Saunders.....	2	132	148	280	206,600
Taber.....	4	97	38	135	.....
Tofield.....	4	306	8	314	161,200
Total.....	92	42,474	19,189	61,663	53,590,982

## COAL-CUTTING MACHINERY

Areas	No. of machines operated by			Tons of coal mined by	
	Electricity	Compressed Air Picks	Mach.	Electricity	Compressed Air
Big Valley.....	1	.....	1	6,000	724
Camrose.....	2	.....	.....	22,000	.....
Carbon.....	6	.....	1	6,187	592
Cascade.....	.....	52	5	.....	43,665
Castor.....	3	.....	4	12,438	4,439
Champion.....	.....	.....	1	.....	1,400
Coalspur.....	.....	.....	44	.....	385,361
Crownnest.....	5	260	3	27,000	632,247
Drumheller.....	110	.....	1	1,494,119	2,000
Edmonton.....	26	.....	1	309,857	9,598
Gleichen.....	1	.....	.....	4,200	.....
Highwood.....	.....	.....	1	.....	700
Lethbridge.....	25	.....	1	383,584	427
Milk River.....	.....	.....	2	.....	1,300
Pembina.....	.....	.....	1	.....	2,648
Redcliff.....	1	.....	.....	8,000	.....
Saunders.....	.....	.....	10	.....	50,961
Taber.....	2	.....	1	5,586	624
Tofield.....	2	.....	.....	5,737	.....
Total.....	184	312	77	2,284,708	1,136,686

## THE MINES DIVISION

## ACCIDENTS

Summary table showing Accidents occurring in the Mines from 1906 to 1949 inclusive,  
reportable under The Coal Mines Regulation Act

Year	Output	Accidents			Tons of coal mined per accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
1906.....	1,385,000	10	11	20	138,500	126,909	60,250
1907.....	1,834,745	19	18	68	96,565	101,930	26,981
1908.....	1,845,000	11	38	13	167,727	48,552	141,923
1909.....	2,174,329	9	42	18	241,952	51,769	120,796
1910.....	3,036,757	61a	41	58	49,782	71,067	52,375
1911.....	1,694,564	7	32	45	242,080	52,955	37,658
1912.....	3,446,349	21	38	58	164,111	90,693	59,419
1913.....	4,306,346	28	60	83	152,789	71,772	51,883
1914.....	3,821,739	209b	44	50	18,286	86,857	76,434
1915.....	3,434,891	18	33	33	190,827	104,087	104,087
1916.....	4,648,604	20	51	34	232,430	91,149	136,723
1917.....	4,863,414	24	62	39	202,642	78,442	124,703
1918.....	6,148,620	22	60	77	279,483	102,477	79,860
1919.....	5,022,412	21	56	54	239,162	89,685	93,008
1920.....	6,908,923	20	53	38	238,733	130,371	181,814
1921.....	5,937,195	21	64	25	282,721	92,769	237,488
1922.....	5,976,432	35	38	35	170,755	157,274	170,755
1923.....	6,866,923	22	44	10	312,133	156,066	686,692
1924.....	5,203,713	21	42	40	247,796	123,898	130,093
1925.....	5,883,394	30	59	56	196,113	99,718	105,060
1926.....	6,508,908	39c	67	119	166,398	97,148	54,696
1927.....	6,936,780	26	76	115	266,799	91,273	60,320
1928.....	7,334,179	28	71	122	261,935	103,298	60,166
1929.....	7,147,250	31	69	98	230,556	103,583	72,931
1930.....	5,755,911	11	69	97	523,265	83,419	59,339
1931.....	4,563,309	16	75	73	285,207	60,844	62,511
1932.....	4,867,984	11	61	96	442,544	79,803	50,708
1933.....	4,714,784	6	60	109	785,797	78,580	43,255
1934.....	4,748,848	15	68	70	316,589	69,836	67,840
1935.....	5,462,973	35d	66	113	156,085	82,772	48,352
1936.....	5,696,375	11	79	101	517,852	72,106	56,400
1937.....	5,551,682	20	72	73	277,584	77,107	76,050
1938.....	5,230,015	21e	72	135	249,040	72,639	38,741
1939.....	5,518,105	17	57	180	324,594	96,809	30,657
1940.....	6,205,088	13	79	97	477,314	78,545	63,970
1941.....	6,970,064	48f	78	142	145,209	89,360	49,084
1942.....	7,754,279	17	92	148	456,134	84,285	52,393
1943.....	7,677,982	25g	73	152	307,119	105,178	50,513
1944.....	7,427,433	10	70	125	742,743	106,106	59,419
1945.....	7,801,248	23h	51	168	339,185	154,925	46,436
1946.....	8,824,455	12	76	128	735,371	116,111	68,941
1947.....	8,074,596	15	121	117	538,306	66,732	69,014
1948.....	8,111,013	13	91	93	623,924	89,132	87,215
1949.....	8,616,983	13	89	108	662,076	96,708	79,694
Total.....	241,939,594	1,114	2,668	3,540	217,181	90,682	68,345

- a. Including thirty-one deaths caused by the Bellevue Explosion.
- b. Including one hundred and eighty-nine deaths caused by the Hillcrest Explosion.
- c. Including ten deaths caused by the McGillivray Creek Coal & Coke Co. Ltd. Explosion and two deaths caused by explosion at the Hillcrest Collieries Ltd. at Hillcrest.
- d. Including sixteen deaths caused by the explosion at Lethbridge Collieries Ltd. at Coalhurst.
- e. Including five deaths caused by the explosion at Hinton Collieries Ltd.
- f. Including four deaths caused by an explosion at North American Collieries Ltd. Western Crown Mine, and twenty-nine deaths caused by an explosion at Brazeau Collieries Ltd., Nordegg.
- g. Including four deaths caused by an explosion at the Kerralta Coal Co. Ltd., Lethbridge.
- h. Including seven deaths caused by an explosion at Luscar Coals Ltd., Luscar.

ACCIDENTS DURING 1949, CLASSIFIED ACCORDING TO THE COAL FIELDS  
IN WHICH THEY OCCURRED

Field	Output	Accidents			Tons of coal mined per accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
Bituminous.....	5,495,327	8	58	66	685,666	94,575	83,111
Sub-Bituminous.....	3,121,656	5	31	42	624,331	100,699	74,325
Total.....	8,616,983	13	89	108	662,076	96,708	79,694

COMPARISON OF PROTECTIVE CLOTHING USED FOR THE YEARS, 1947, 1948  
AND 1949

	1947	1948	1949
Hard Hats.....	5,214	5,306	5,980
Safety Shoes, pairs.....	3,291	3,671	3,905
Goggles, pairs.....	608	573	757
Knee Pads, pairs.....	299	240	401

## THE MINES DIVISION

Year	Tonnage	Total No. of men employed	Fatal Accidents			Serious Accidents			Slight Accidents			Total
			Per 1,000,000 tons	%	Per 1,000 men	Per 1,000,000 tons	%	Per 1,000 men	Per 1,000,000 tons	%	Per 1,000 men	
1915	3,434,891	6,445	18	5.24	2.79	33	9.63	5.12	33	9.63	5.12	84
1916	4,338,604	7,570	20	4.31	2.64	51	10.99	6.74	34	7.33	4.49	105
1917	4,863,414	8,310	24	4.93	2.88	62	12.75	7.46	39	8.02	4.69	125
1918	6,148,620	8,818	22	3.57	2.51	60	9.95	6.84	77	12.52	7.78	159
1919	5,022,412	7,573	21	4.18	2.78	56	11.15	7.39	54	10.75	7.13	131
1920	6,908,923	9,688	29	4.20	2.99	53	7.81	6.10	38	5.50	4.37	120
1921	5,927,195	10,018	21	3.54	2.10	64	10.78	6.39	25	4.23	2.50	110
1922	5,976,432	8,747	35	5.86	4.09	38	6.36	4.45	35	5.86	4.09	108
1923	6,866,923	9,927	22	3.19	2.21	44	6.39	4.43	10	1.45	1.00	76
1924	5,203,713	7,317	21	4.03	2.86	42	8.07	5.74	40	7.68	5.47	103
1925	5,885,394	8,774	30	5.10	3.40	59	10.03	3.42	56	9.52	6.38	145
1926	6,508,908	8,763	39c	5.99	4.99	67	10.29	7.65	119	10.33	13.58	225
1927	6,936,780	9,016	26	3.75	2.88	76	10.96	8.43	115	11.50	12.71	217
1928	7,334,179	9,496	28	3.82	2.96	71	9.68	7.48	122	13.63	12.85	221
1929	7,147,250	9,572	31	4.34	3.24	69	9.65	7.21	98	12.71	10.24	198
1930	5,755,911	8,889	11	1.91	1.24	69	11.99	7.76	97	17.20	10.90	177
1931	4,563,309	8,070	16	3.51	1.98	75	16.44	9.27	73	16.00	9.04	164
1932	4,867,984	7,837	11	2.26	1.40	61	12.53	7.78	96	19.72	12.23	168
1933	4,714,784*	8,042	6	1.27	.75	60	12.73	7.46	109	20.99	13.55	175
1934	4,748,848*	7,863	15	3.14	1.91	68	14.31	8.65	70	14.74	8.90	153
1935	5,462,973	7,800	35d	6.40	4.47	66	12.08	8.44	113	20.68	14.44	214
1936	5,696,375	8,110	11	1.93	1.36	79	13.87	9.74	101	17.73	12.45	191
1937	5,531,682*	7,836	20	3.60	2.55	72	12.97	9.19	73	13.15	9.32	165
1938	5,230,015*	7,411	21e	4.01	2.83	72	13.76	9.71	135	25.81	18.21	228
1939	5,518,105*	7,456	17	3.08	2.27	57	10.33	7.64	180	32.60	24.14	254
1940	6,205,088*	7,416	13	2.10	1.76	79	12.73	10.65	97	15.63	13.08	189
1941	6,970,064*	7,714	48f	6.80	6.22	78	11.19	10.11	142	20.37	18.41	268
1942	7,54,279*	8,040	17	2.19	2.11	92	11.86	11.44	148	19.09	18.40	257
1943	7,677,982*	8,636	23	2.86	2.87	73	9.51	8.45	152	19.80	17.60	250
1944	7,427,433*	8,375	10	1.34	1.19	70	9.42	8.35	125	16.83	14.92	205
1945	7,801,248*	8,309	23h	2.93	2.76	51	6.53	6.13	168	21.53	20.24	242
1946	8,824,455*	8,583	12	1.36	1.39	76	8.61	8.85	128	14.50	14.91	216
1947	8,074,596*	8,772	15	1.86	1.71	121	14.98	13.79	117	14.49	13.33	253
1948	8,111,013*	8,865	13	1.60	1.47	91	11.22	10.27	93	11.47	10.49	197
1949	8,682	13	1.51	1.50	.89	10.33	10.25	108	12.53	12.44	210	24.37

c Including 10 deaths by explosion at McGillivray Creek Coal & Coke Co., Ltd., Coleman.

d Including 16 deaths by explosion at Lethbridge Collieries Ltd., Coalhurst.

e Including 5 deaths by explosion at Hinton Collieries Ltd., Hinton.

f Including 4 deaths by explosion at North American Collieries, Ltd., East Coulee, and 29 deaths by explosion at Brazeau Collieries Ltd., Nordegg.

g Including 4 deaths caused by explosion at the Kerralta Coal Co., Lethbridge.

h Including 7 deaths caused by explosion at the Luscar Coals Ltd., Luscar.

\* Output does not include coal produced by farmers under permit.

## THE MINES DIVISION

Number of tons produced per accident

## BITUMINOUS COAL FIELD

Areas	Output	Average No. of men employed	No. of tons produced per accident			
			Fatal	Serious	Slight	Total
<b>Group 1:</b>						
Cascade.....	304,743	346	.....	38,093	60,949	23,442
Highwood.....	2,958	12	.....	.....	.....	.....
Nordegg.....	338,280	395	338,280	67,656	67,656	30,753
<b>Group 2:</b>						
Crowsnest.....	2,465,426	2,432	493,085	91,382	102,726	44,025
Mountain Park.....	1,128,903	786	.....	225,781	188,151	102,628
<b>Group 3:</b>						
Coalspur.....	810,675	683	405,338	135,113	90,075	47,687
Halcourt.....	282	1	.....	.....	.....	.....
Lethbridge.....	384,431	646	.....	76,886	25,629	19,222
Morley.....	140	1	.....	.....	.....	.....
Pekisko.....	7,057	8	.....	.....	.....	.....
Pincher.....	870	3	.....	.....	.....	.....
Prairie Creek.....	321	2	.....	.....	.....	.....
Sauders.....	50,961	115	.....	25,481	25,481	12,741
No Area.....	280	1	.....	.....	.....	.....
<b>Total.....</b>	<b>5,495,327</b>	<b>5,431</b>	<b>686,916</b>	<b>94,747</b>	<b>83,263</b>	<b>41,631</b>

## SUB-BITUMINOUS COAL FIELD

Areas	Output	Average No. of men employed	No. of tons produced per accident			
			Fatal	Serious	Slight	Total
<b>Group 4:</b>						
Ardley.....	18,565	16	.....	.....	.....	.....
Big Valley.....	27,550	28	.....	.....	.....	.....
Brooks.....	119,815	67	.....	.....	.....	.....
Carbon.....	56,962	92	.....	.....	.....	.....
Champion.....	5,950	13	.....	.....	.....	.....
Drumheller.....	1,608,589	2,097	321,718	67,025	43,475	24,373
Edmonton.....	473,767	480	.....	94,753	94,753	47,377
Gleichen.....	13,201	33	.....	.....	.....	.....
Milk River.....	1,302	3	.....	.....	.....	.....
Pembina.....	180,382	71	.....	.....	.....	.....
Taber.....	137,629	42	.....	.....	.....	.....
Wetaskiwin.....	1,411	3	.....	.....	.....	.....
Whitecourt.....	459	2	.....	.....	.....	.....
<b>Group 5:</b>						
Camrose.....	76,222	73	.....	.....	.....	.....
Castor.....	127,397	102	.....	127,397	.....	127,397
Pakowki.....	448	1	.....	.....	.....	.....
Redcliff.....	11,518	18	.....	11,518	.....	11,518
Rochester.....	520	1	.....	.....	.....	.....
Sheerness.....	56,684	26	.....	.....	.....	.....
Slave.....	75	1	.....	.....	.....	.....
Tofield.....	193,503	73	.....	.....	.....	.....
Westlock.....	9,697	9	.....	.....	.....	.....
<b>Total.....</b>	<b>3,121,656</b>	<b>3,251</b>	<b>624,331</b>	<b>100,699</b>	<b>74,325</b>	<b>40,021</b>

## SUMMARY

Bituminous.....	5,495,327	5,431	686,916	94,747	83,263	41,631
Sub-Bituminous.....	3,121,656	3,251	624,331	100,699	74,325	40,021
<b>Total.....</b>	<b>8,616,983</b>	<b>8,682</b>	<b>662,845</b>	<b>96,820</b>	<b>79,787</b>	<b>41,033</b>

Classification of Accidents according to output of mines which produced during the year 1949

Accidents	Under 1,000 tons		5,000 to 10,000 tons		10,000 to 50,000 tons		50,000 to 100,000 tons		100,000 to 150,000 tons		150,000 to 200,000 tons		200,000 to 300,000 tons		Over 300,000 tons		Total		
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total			
Fatal.....	.....	.....	.....	2	.....	.....	.....	9	2	10	7	2	3	1	29	20	14	5	13
Serious.....	.....	.....	.....	3	.....	.....	.....	9	11	11	14	7	13	1	29	14	31	25	89
Slight.....	.....	.....	.....	.....	.....	.....	.....	9	11	11	14	14	29	14	29	14	31	108	
Total.....	.....	.....	.....	2	3	18	23	18	23	23	23	45	35	45	35	61	210		

Tons of coal produced per accident

Fatal	Under 1,000 tons			5,000 to 10,000 tons			10,000 to 50,000 tons			50,000 to 100,000 tons			100,000 to 150,000 tons			150,000 to 200,000 tons			200,000 to 300,000 tons			Total	
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total			
Fatal.....	.....	.....	.....	43,468	43,468	.....	75,650	75,650	75,650	425,185	425,185	530,328	463,850	463,850	107,042	798,434	798,434	39,922	141,449	141,449	707,244	662,076	
Serious.....	.....	.....	.....	66,369	66,369	.....	75,650	75,650	75,650	85,037	85,037	151,522	47,985	47,985	570,310	570,310	570,310	114,072	114,072	114,072	96,708	96,708	
Slight.....	.....	.....	.....	.....	.....	.....	.....	9	9	9	77,306	75,761	75,761	36,973	36,973	36,973	30,923	30,923	30,923	228,124	228,124		
Total.....	.....	.....	.....	66,369	66,369	43,468	37,825	37,825	37,825	46,115	46,115	46,115	30,923	30,923	30,923	228,124	228,124	228,124	57,971	57,971	57,971	409,856	409,856

## FATAL ACCIDENTS

Ernest Blasetti, driver, 34, on February 9th, 1949, at the mine operated by the Brazeau Collieries Ltd., Nordegg. He was driving locomotive in the surface yard when he ran into the rear of a timber car which was crossing the mine tracks, and he was pinned between the truck and the locomotive, causing fatal injuries.

James Gordon, miner, 25, on February 21st, at the mine operated by the Western Gem and Jewel Collieries Ltd., Cambria. He was prying down a large piece of bone from the roof of Pilot Entry of Longwall No. 1, when the bone glanced off bench, crushing him between it and the floor, fracturing clavicle, ribs and left arm, which resulted in death.

John Kostiuk, motorman, 21, on April 21st, at the mine operated by the Century Coals Ltd., (Commander Mine), Drumheller. He was switching a car of ties in 12 Room on 2 South Entry, when a tie was pushed against timber and he suffered fatal injuries from falling rock.

Tony Sterba, loader boss, 39, on May 23rd, at the mine operated by the West Canadian Collieries Ltd. (Bellevue Mine), Bellevue. He was pulling loads from No. 8 Level South, when a car of lagging blocked slope and struck him, causing crushed chest, which resulted in death.

Alexander Allen, miner, 58, on July 20th, at the mine operated by the Midland Coal Mining Co. Ltd., Drumheller. He was caught by a fall of rock in 37 Room, 26 South Entry, causing back injuries and a fractured right leg, which resulted in death on July 25th.

Henryk Kutkowski, miner, 34, on July 25th, at the mine operated by the McGillivray Creek Coal & Coke Co. Ltd., Coleman. He went down to the entry for lagging in No. 1 Room, 4 Level South, No. 4 Seam, and apparently went into the wrong place and was asphyxiated, causing death.

Philip Marcolli, tractor driver, 35, on August 5th, at the mine operated by the West Canadian Collieries Ltd. (Bellevue Mine), Bellevue. He was riding in a company truck, which was conveying him and the tractor from the Adanac Strip Mine to the Greenhill Mine, and the truck went out of control and caught on fire, which resulted in his death.

Thomas Gordon, fireboss, 59, on August 9th, at the mine operated by the Western Gem and Jewel Collieries Ltd., Cambria. He was walking along wall face in 8 South, and a slip of coal broke loose from the face and fell on him, causing injuries to pelvis, back and left ribs, and severe shock, which resulted in death.

Donald McKenzie, miner, 31, on September 1st, at the mine operated by the Foothills Collieries Ltd., Foothills. He was loosening a sprag by undermining in Room 29, 7 North Entry, when the coal suddenly gave way and fell on top of him, causing fatal injuries.

Alfred Watters, motorman, 43, on September 29th, at the mine operated by the Red Deer Valley Coal Co. Ltd., Drumheller. He was pushing a mine car of conveyor pans in the Run-around, No. 7 North Entry, 13 West, when one end of a pan jammed him against the locomotive, causing fractured right ribs, clavicle and scapula, which resulted in death.

Dmytro Kotyk, miner, 56, on December 17th, at the mine operated by the Foothills Collieries Ltd., Foothills. He was nailing a piece of sheet iron in Room 5, 6 North, when a piece of coal came down and struck him on the head, causing fatal injuries.

Mike Kwiatowski, miner, 25, on December 16th, at the mine operated by the West Canadian Collieries Ltd., (Greenhill Mine), Blairmore. He was caught in a fall of coal in 3 off 19½ Pillar, No. 6, Level, causing fatal injuries.

Benjamin Carter, miner, 66, on December 16th, at the mine operated by the West Canadian Collieries Ltd., (Greenhill Mine), Blairmore. He was caught in a fall of coal in 3 off 19½ Pillar, No. 6 Level, causing fatal injuries.

In addition to the above, the following deaths have occurred in and around mines, which have not been entered as mine fatalities:

Konstanty Jemioło, machineman's helper, 48, on May 3rd, at the mine operated by the Lethbridge Collieries Ltd., Shaughnessy. He collapsed due to heart failure on the Main travelling road.

Joseph Krizan, pit overman, 46, on June 3rd, at the shale pit operated by the Redcliff Pressed Brick Co. Ltd., Redcliff. He was knocked down by loose shale and clay, causing injuries to his head and face, which resulted in death.

Charles K. Grieve, pumpman, 61, on August 6th, at the mine operated by the Cadomin Coal Co. Ltd., Cadomin. He collapsed due to heart seizure in No. 2 Strip Mine.

Antonio Malovich, miner, 60, on October 29th, at the mine operated by the Bighorn and Saunders Creek Collieries Ltd., Saunders. He died as a result of anaesthetic given for the amputation of two fingers.

Edward Bodgener, truck driver, 23, on December 12th, at the mine operated by the Hillcrest-Mohawk Collieries Ltd., Bellevue. He was driving truck which evidently went out of control, and went into the lake, causing fatal injuries.

## ACCIDENTS AS THEY OCCURRED BY MONTHS DURING THE YEAR 1949

Months	Above Ground				Below Ground				Total Above and Below Grd
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
January.....	..	1	2	3	..	9	9	18	21
February.....	1	2	1	4	1	9	6	16	20
March.....	..	1	1	1	..	5	5	10	11
April.....	..	2	3	5	1	3	4	8	13
May.....	..	..	..	..	1	3	11	15	15
June.....	..	..	1	1	..	10	7	17	18
July.....	..	2	2	4	2	5	6	13	17
August.....	1	1	1	3	1	6	13	20	23
September.....	..	1	1	2	2	7	10	19	21
October.....	..	2	1	3	..	12	8	20	23
November.....	..	..	..	..	..	5	6	11	11
December.....	..	1	3	4	3	3	7	13	17
Total.....	2	12	16	30	11	77	92	180	210

ACCIDENTS OCCURRING IN THE PROVINCE ABOVE AND UNDER GROUND  
DURING THE YEAR 1949

Cause of Accident	Above Ground				Below Ground				Total Above and Below Grd
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Box-car handling.....	..	1	4	5	..	..	..	..	5
Bucking coal.....	..	..	..	..	..	1	2	3	3
Chute loading.....	..	..	..	..	..	..	2	2	2
Coal-cutting machinery.....	..	..	..	..	..	4	2	6	6
Coupling cars.....	..	..	..	..	..	1	1	2	2
Electricity.....	..	2	..	2	..	..	..	..	2
Explosives.....	..	..	..	..	..	2	1	3	3
Fall of coal.....	..	..	..	..	5	14	16	35	35
Fall of rock.....	..	..	..	..	2	15	12	29	29
Gases.....	..	..	..	..	1	..	..	1	1
Haulage.....	1	..	..	1	3	29	20	52	53
Loading coal.....	..	..	..	..	..	..	12	12	12
Miscellaneous.....	1	4	10	15	..	9	20	29	44
Spragging cars.....	..	..	..	..	..	..	3	3	3
Strip-mining.....	..	1	1	2	..	..	..	..	2
Timbering.....	..	..	..	..	..	2	1	3	3
Tipple machinery.....	..	4	1	5	..	..	..	..	5
Total.....	2	12	16	30	11	77	92	180	210

## THE MINES DIVISION

ACCIDENTS OCCURRING IN THE PROVINCE ABOVE AND BELOW GROUND  
FOR THE YEAR 1949, CLASSIFIED ACCORDING TO THE AREA IN  
WHICH THEY OCCURRED

## BITUMINOUS

Areas	Above Ground			Below Ground			Total Above and Below Grd		
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Cascade.....	...	...	...	...	...	8	5	13	13
Nordegg.....	1	1	...	2	...	4	5	9	11
Crowsnest.....	1	4	5	10	4	23	19	46	56
Mountain Park.....	...	3	4	7	...	2	2	4	11
Calspur.....	...	3	1	4	2	3	8	13	17
Lethbridge.....	...	...	...	...	...	5	15	20	20
Saunders.....	...	...	1	1	...	2	1	3	4
Total.....	2	11	11	24	6	47	55	108	132

## SUB-BITUMINOUS

Drumheller.....	...	1	5	6	5	23	32	60	66
Edmonton.....	...	...	...	...	...	5	5	10	10
Castor.....	...	...	...	...	...	1	...	1	1
Redcliff.....	...	...	...	...	...	1	...	1	1
Total.....	...	1	5	6	5	30	37	72	78

## CLASSIFICATION OF ACCIDENTS ACCORDING TO THE COAL FIELDS IN WHICH THEY OCCURRED

BRITIMNOIS

## ANNUAL REPORT, 1949

Causes	Above Ground		Below Ground		Total Above and Below Grd
	Total Serious	Slight	Total Serious	Slight	
Rope Haulage, caught arm between car and roof .....	.....	.....	.....	2	4
Rope Haulage, hit by derailed car .....	.....	.....	.....	2	2
Rope Haulage, struck by car .....	.....	.....	1	.....	1
Rope Haulage, hand squeezed between rope and pulley .....	.....	.....	1	.....	1
Rope Haulage, squeeze between rope and rib .....	.....	.....	.....	1	1
Rope Haulage, hand caught between rope and wheel .....	.....	.....	3	.....	3
Rope Haulage, derailed car dropped on his foot .....	.....	.....	1	.....	2
Rope Haulage, squeezed between cars and rib .....	.....	.....	.....	1	1
Rope Haulage, hit by strip handle .....	.....	.....	.....	1	1
Rope Haulage, blocking trip with boom and it fell on his foot.	.....	.....	.....	1	1
Horse Haulage, squeezed by horse in stall .....	.....	.....	1	.....	1
Horse Haulage, fell while taking horse to stable .....	.....	.....	1	.....	1
Horse Haulage, foot slipped under wheel of car .....	.....	.....	.....	1	1
Hand Haulage, hand squeezed between ears .....	.....	.....	.....	1	1
Hand Haulage, hand caught between car and post .....	.....	.....	3	.....	3
Locomotive Haulage, squeezed between locomotive and post .....	1	1	.....	.....	1
Locomotive Haulage, in collision with truck at surface crossing .....	.....	.....	1	.....	1
Locomotive Haulage, struck his hand against car .....	.....	.....	4	1	5
Locomotive Haulage, putting block under car, wheel caught finger .....	.....	.....	3	6	9
Fall of rock in room .....	.....	.....	4	1	5
Fall of rock in pillar .....	.....	.....	2	8	18
Fall of coal in room .....	.....	.....	2	2	2
Fall of coal in pillar .....	.....	.....	2	1	5
Loading coal, piece fell on his foot .....	.....	.....	2	2	2
Loading Coal, hand squeezed between two pieces of coal .....	.....	.....	1	1	1

## THE MINES DIVISION

Causes	Above Ground		Below Ground		Total Above and Below Grd
	Fatal	Serious	Fatal	Serious	
Loading Coal, squeezed hand between coal and timber.....	...	...	...	...	1
Strip Mining, fall of dirt from sides.....	...	1	...	...	1
Strip Mining, hit by flying rock during shot-firing.....	...	1	1	...	1
Box-car Handling, fell from box-car ladder.....	...	1	1	...	1
Box-car Handling, hook slipped off ear and hit his leg.....	...	1	1	...	1
Box-car Handling, caught thumb between ladder and door.....	...	1	1	...	1
Timbering, rock fell on him.....	...	1	...	1	1
Timbering, timber fell on his hand.....	...	1	...	1	1
Timbering, timber fell on his leg.....	...	1	...	1	1
Coal-cutting Machinery, jack fell on his finger.....	...	1	...	1	1
Bucking Coal, hit his wrist against side of chute.....	...	1	...	1	1
Bucking Coal, straddled check post.....	...	1	...	1	1
Bucking Coal, lump of coal hit his finger.....	...	1	...	1	1
Tipple Machinery, caught leg in fly-wheel of shaker screen.....	1	1	...	1	1
Tipple Machinery, caught arm in machinery.....	1	1	...	1	1
Tipple Machinery, caught arm between belt and pulley.....	1	1	...	1	1
Tipple Machinery, box-car loader ran over his foot.....	1	1	...	1	1
Tipple Machinery, clothing caught in moving machinery.....	1	1	...	1	1
Explosives, hit by flying coal.....	...	1	...	1	1
Explosives, hit by cardox shell.....	...	1	...	1	1
Coupling Cars, squeezed finger with clevis pin.....	...	1	...	1	1
Coupling Cars, foot caught between bumpers of cars.....	...	1	...	1	1
Spragging Cars, wheel of car passed over his foot.....	...	1	...	1	1
Gases, asphyxiated.....	...	1	...	1	1
Chute Loading, hit by piece of coal from chute.....	...	1	...	1	1
Chute Loading, slipped and fell from car.....	...	1	...	1	1
Electricity, burned hands when test lamp arced.....	1	...	1	...	1

BITUMINOUS—continued

SUB-BITUMINOUS

Rope Haulage, squeezed leg between bumpers of cars.....	1
Rope Haulage, squeezed between ear and post.....	1
Rope Haulage, squeezed between ear and post.....	1
Rope Haulage, squeezed between ears.....	1
Rope Haulage, hit by runaway car.....	1
Rope Haulage, squeezed between derailed car and prop.....	1
Rope Haulage, squeezed arm between ear and roof.....	2
Rope Haulage, foot slipped under wheel of car.....	2
Rope Haulage, hit his hand against ear.....	1
Rope Haulage, caught thumb between car and tail chain.....	1
Rope Haulage, wheel passed over his foot.....	1
Rope Haulage, fell in front of ear.....	2

## THE MINES DIVISION

## SUB-BITUMINOUS—continued

Causes	Above Ground		Below Ground		Total Above and Below Grd
	Fatal	Slight	Total	Serious	Fatal
Hand Haulage, hurt shoulder while pushing car.....	.....	.....	.....	1	1
Hand Haulage, slipped while pushing car.....	.....	.....	.....	1	1
Locomotive Haulage, squeezed between locomotive and conveyor pants.....	.....	.....	1	1	1
Locomotive Haulage, caught foot between bumpers of locomotive and car.....	.....	.....	1	1	1
Locomotive Haulage, lifting derailed car and hit his hand against prop.....	.....	.....	.....	1	1
Locomotive Haulage, timber knocked out by locomotive and rock fell on him.....	.....	.....	1	1	1
Locomotive Haulage, squeezed between car and rib.....	.....	.....	.....	1	2
Locomotive Haulage, squeezed between locomotive and car.....	.....	.....	.....	1	2
Locomotive Haulage, squeezed between locomotive and hauling door.....	.....	.....	.....	1	1
Locomotive Haulage, squeezed between cars.....	.....	.....	.....	1	1
Fall of rock in entry.....	.....	.....	1	1	3
Fall of rock in room.....	.....	.....	1	1	2
Fall of rock on longwall face.....	.....	.....	1	1	2
Fall of coal in entry.....	.....	.....	.....	2	5
Fall of coal in room.....	.....	.....	1	2	5
Fall of coal on longwall face.....	.....	.....	.....	2	5
Loading Coal, piece of coal fell on his foot.....	.....	.....	.....	4	4
Loading Coal, slipped while loading coal.....	.....	.....	.....	1	1
Loading Coal, piece of coal fell on his hand.....	.....	.....	.....	1	1
Loading Coal, squeezed foot between lumps of coal.....	.....	.....	.....	1	1
Loading Coal, hit finger between coal and car.....	.....	1	1	1	1
Box-car Handling, brake stick hit his hand.....	.....	1	1	1	1
Box-car Handling, fell from box-car.....	.....	.....	1	1	1
Coal-cutting Machinery, slipped on cutting chain.....	.....	.....	1	1	1
Coal-cutting Machinery, jack fell on him.....	.....	.....	1	1	1
Coal-cutting Machinery, caterpillar treads passed over his foot.....	.....	.....	1	1	1

## SUB-BITUMINOUS—continued

Coal-cutting Machinery, while cutting, prop fell on him.....	....	....	....	....	....	2	....	2	2
Explosives, hit by flying coal from shot.....	....	....	....	....	1	....	1	1	1
Spragging Cars, finger caught between sprag and wheel.....	....	....	....	....	....	1	1	1	1
Spragging Cars, wheel of car ran over finger.....	....	....	....	....	....	1	1	1	1
Miscellaneous, hit by piece of coal from trip.....	....	....	....	....	1	....	1	1	1
Miscellaneous, fell from ladder.....	....	....	....	1	....	....	....	....	1
Miscellaneous, unloading rails and squeezed fingers.....	....	....	1	1	....	....	....	....	1
Miscellaneous, slipped and fell.....	....	....	1	1	....	....	....	....	1
Miscellaneous, rock from chute hit him.....	....	....	1	1	....	1	1	1	2
Miscellaneous, unloading timber and squeezed his fingers.....	....	....	....	....	....	1	1	1	1
Miscellaneous, unloading cradle on his foot.....	....	....	....	....	....	1	....	1	1
Miscellaneous, testing coal drill and it hit his face.....	....	....	....	....	....	1	....	1	1
Miscellaneous, moving steel cogs and bumped finger.....	....	....	....	....	....	1	1	1	1
Miscellaneous, moving steel cogs which fell on his foot.....	....	....	....	....	....	1	1	1	1
Miscellaneous, caught finger between conveyor pans.....	....	....	....	....	....	1	1	1	1
Miscellaneous, jack fell on his foot.....	....	....	....	....	....	1	1	1	1
Total.....	1	5	6	5	30	37	72	72	78

## SUMMARY

Bituminous.....	2	11	11	24	6	47	55	108	132
Sub-bituminous.....	....	1	5	6	5	30	37	72	78
Total.....	2	12	16	30	11	77	92	180	210

## THE MINES DIVISION

Accidents during 1949, classified according to the Mines in which they occurred

## BITUMINOUS

Name of Operator	Areas	Above Ground		Below Ground		Total Above and Below Grd
		Fatal	Slight	Fatal	Slight	
Alexo Coal Co. Ltd.						
Bighorn & Saunders Creek Collieries Ltd.	Saunders			1	1	2
Brazza Collieries Ltd.	Saunders				2	2
Cadomin Coal Co. Ltd.	Nordegg	1	1	2	4	5
Cannmore Mines Ltd.	Mountain Park			1	2	3
Chester Coal Mine	Cascade				6	6
Foothills Collieries Ltd.	Lethbridge				4	4
Gregg River Collieries Ltd.	Coalspur				1	1
Hillcrest-Mohawk Collieries Ltd.	Mountain Park			1	2	3
International Coal & Coke Co. Ltd.	Crowsnest			1	2	3
Kananaskis Exploration & Development Co. Ltd.	Crowsnest			2	4	6
King Coal & Lumber Co.	Cascade				4	4
Lethbridge Collieries Ltd. (1263)	Coalspur				2	2
Lethbridge Collieries Ltd. (1464)	Lethbridge				1	1
Luscar Coals Ltd.	Mountain Park			1	1	2
Mountain Park Coals Ltd.	Mountain Park	2	4			5
McGillivray Creek Coal & Coke Co. Ltd.	Crowsnest			1	1	2
McLeod River Hard Coal Co. (1941) Ltd.	Coalspur			2	3	5
West Canadian Collieries Ltd. (87)	Crowsnest	1	1	3	3	6
West Canadian Collieries Ltd. (396)	Crowsnest			1	2	3
West Canadian Collieries Ltd. (1584)	Crowsnest				3	3
	Total	2	11	11	24	6
						108
						132

## SUB-BITUMINOUS

Banner Coals Ltd.....	Edmonton.....	1	5	6	5	30	37	72
Brilliant Coal Co., Ltd.....	Drumheller.....	.....	.....	.....	.....	.....	.....	.....
Carbondale Collieries Ltd.....	Edmonton.....	.....	.....	.....	.....	.....	.....	.....
Century Coals Ltd. (422).....	Drumheller.....	.....	.....	.....	.....	.....	.....	.....
Century Coals Ltd. (1484).....	Drumheller.....	2	2	1	4	9	14	16
Great West Coal Co., Ltd.....	Edmonton.....	1	1	1	3	1	4	5
Maple Leaf Coal Co., Ltd.....	Drumheller.....	.....	.....	.....	1	.....	1	1
Midland Coal Mining Co., Ltd.....	Drumheller.....	1	.....	1	1	1	1	1
Monarch Coal Mining Co., Ltd.....	Drumheller.....	1	1	1	1	1	1	2
Morinville Collieries Ltd.....	Edmonton.....	.....	.....	2	2	2	4	5
Murray Collieries Ltd.....	Drumheller.....	.....	.....	1	.....	1	1	1
Naco Coal Co., Ltd.....	Bedeliff.....	.....	.....	2	.....	2	2	2
Newcastle Coals Ltd.....	Drumheller.....	.....	.....	1	.....	1	1	1
O. V. Renilliard.....	Castor.....	.....	.....	1	2	3	3	3
Red Deer Valley Coal Co., Ltd.....	Drumheller.....	.....	1	2	.....	1	1	1
Rosedale Collieries Ltd. (346).....	Drumheller.....	.....	1	1	.....	1	1	1
Saskatchewan Federated Co-operatives Ltd. (1299).....	Drumheller.....	.....	2	3	5	5	5	5
Saskatchewan Federated Co-operatives Ltd. (1421).....	Drumheller.....	.....	2	9	11	11	11	11
Starkey Coal Co., Ltd.....	Edmonton.....	1	1	2	1	2	3	3
Western Gem and Jewel Collieries Ltd. ....	Drumheller.....	.....	1	1	3	6	7	7
Total.....		1	5	6	5	30	37	72

## SUMMARY

## THE MINES DIVISION

LIST OF PROSECUTIONS INSTITUTED UNDER THE COAL MINES REGULATION ACT, FOR THE YEAR ENDING DECEMBER 31, 1949

Mine in which Contravention was committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
McLeod River Hard Coal Co. (1941) Ltd.	Miner.....	Did fail to shut off the power from a Coal Loading machine being operated by him before removing an obstruction which interfered with its normal operation	Convicted.....	Fined \$10.00.....	\$13.70
Western Gem & Jewel Colls,Ltd.....	Mine Manager.....	Did allow a non-certificated person to make an inspection of the mine, as to the presence of gas, Ventilation, state of roof and sides and general safety.....	Convicted.....	Fined \$25.00.....	\$ 3.50
Western Gem & Jewel Colls, Ltd.....	Miner.....	Did while not being a certificated person make an inspection of the mine, as to the presence of gas, ventilation, state of roof and sides and general safety.....	Convicted.....	Fined \$25.00.....	\$ 3.50
Conger Coal Mine.....	Owner .....	Did, being the manager, fail to send or cause to be sent to the Director of Mines on or before the fifteenth day of each month a correct return showing the quantity of coal or other mineral wrought or mined in such mine for the preceding calendar month.....	Convicted.....	Fined \$25.00.....	\$ 3.50
Hy-Grade Coal Mine.....	Surface Laborer .....	Being a person in or about a mine, did commit an act likely to cause danger to the mine or to himself or to any person, by fighting .....	Convicted.....	Fined \$5.00.....	\$ 3.00
Hy-Grade Coal Mine .....	Surface Laborer .....	Being a person in or about a mine, did commit an act likely to cause danger to the mine or to himself or to any person, by fighting .....	Convicted.....	Fined \$5.00.....	\$ 3.00
Luscar Coals Ltd.....	Miner .....	Did couple up shots, contrary to the Explosive Regulations.....	Convicted.....	Fined \$5.00.....	\$ 3.00
Luscar Coals Ltd.....	Examiner .....	Did allow an unauthorized person to couple up shots..	Convicted.....	Fined \$5.00.....	\$ 4.70
Luscar Coals Ltd.....	Examiner .....	Did before firing a shot, fail to see that all persons were out of reach of danger .....	Convicted.....	Fined \$20.00.....	\$ 3.60
John Lynass.....	Foreman .....	Did, being the manager, fail to send or cause to be sent to the Director of Mines on or before the fifteenth day of each month a correct return showing the quantity of coal or other mineral wrought or mined in such mine for the preceding calendar month.....	Convicted.....	Fined \$20.00.....	\$ 3.60
				Fined \$30.00.....	\$ 3.50

LIST OF PROSECUTIONS INSTITUTED UNDER THE COAL MINES REGULATION ACT, FOR THE YEAR ENDING DECEMBER 31, 1949—Continued

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Mine in which Contravention was committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
Filipenko Coal Mine.....	Owner.....	Did without a permit issued by the Director of Mines for commencement of mining operations, unlawfully commence mining operations at a place at which mining operations have not previously carried on in conformity with the Coal Mines Regulation Act.....	Convicted.....	Fined \$100.00 .....	\$ 4.80
Cadomin Coal Co. Ltd.....	Laborer.....	Did unlawfully have in his possession a shot firing apparatus, without having the necessary Blaster's Certificate.....	Convicted.....	Fined \$25.00 .....	\$ 3.00
Cadomin Coal Co. Ltd.....	Blaster.....	Did fail to see that all persons were out of reach of possible danger from the effects of a shot that was about to be fired.....	Convicted.....	Fined \$30.00 .....	\$ 3.00
Century Coals Ltd. (422).....	Miner.....	Did without lawful authority enter any building or premises without having obtained permission from the owner, agent or manager, overman or outside foreman.....	Convicted.....	Imprisoned for 30 days Charges run concurrently .....	
Century Coals Ltd. (422).....	Miner.....	Did being a person in or about a mine commit an act likely to cause danger to the mine or to himself or to any person.....	Convicted.....	Imprisonment for 30 days .....	
Lakeside Coals Ltd.....	Manager.....	Did fail to see that all requirements of the Act and of all regulations and orders made pursuant thereto were carried out for the safe operation of the mine.....	Convicted.....	Fined \$20.00 .....	\$ 3.00
Lakeside Coals Ltd.....	Foreman.....	Did commit an act likely to cause danger to the mine or to himself or to any other person.....	Convicted.....	Fined \$15.00 .....	\$ 3.00
Kneehill Coals Co. Ltd.....	Manager.....	Did, being the manager, fail to send or cause to be sent to the Director of Mines on or before the fifteenth day of each month a correct return showing the quantity of coal or other mineral wrought or mined in such mine for the preceding calendar month.....	Convicted.....	Fined \$30.00 .....	\$ 4.50

## THE MINES DIVISION

LIST OF PROSECUTIONS INSTITUTED UNDER THE COAL MINES REGULATION ACT, FOR THE YEAR ENDING DECEMBER 31, 1949—Continued

Mine in which Contravention was committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
Big Valley Coal Co. Ltd.....	Manager.....	Did, being the manager, fail to send or cause to be sent to the Director of Mines on or before the fifteenth day of each month a correct return showing the quantity of coal or other mineral wrought or mined in such mine for the preceding calendar month.....	Convicted.....	Fined \$25.00.....	\$ 1.50
Castor Coal & Construction Co., Ltd.....	Manager.....	Did, being the manager, fail to send or cause to be sent to the Director of Mines on or before the fifteenth day of each month a correct return showing the quantity of coal or other mineral wrought or mined in such mine for the preceding calendar month.....	Convicted.....	Fined \$25.00.....	\$ 1.50
Hatax Coal Co. ....	Operator.....	Did fail to send to the Director of Mines and District Inspector, name of official in charge of the mine.....	Convicted.....	Fined \$10.00.....	\$ 2.00
Hatax Coal Co. ....	Operator.....	Did commence mining operations without permission from the Director of Mines.....	Convicted.....	Fined \$10.00.....	\$ 2.00
Neucoal Mines.....	Operator.....	Did commence mining operations without permission from the Director of Mines.....	Convicted.....	Fined \$5.00.....	\$10.50
Duggan Coal Mine.....	Operator.....	Did commit an act likely to cause danger to the mine or to himself or to any person.....	Convicted.....	Fined \$25.00.....	\$ 2.50
Duggan Coal Mine.....	Operator.....	Did recommence mining operations without permission from the Director of Mines.....	Convicted.....	Fined \$10.00.....	\$ 2.00
King Coal & Lumber Co., Ltd.....	Owner.....	Did fail to see that the provisions of the Act and of any regulations, rules or orders were carried out.....	Convicted.....	Fined \$60.00.....	\$ 3.00
King Coal & Lumber Co., Ltd.....	Manager.....	Did fail to have fly-wheel guarded.....	Convicted.....	Fined \$15.00.....	\$ 3.00
Ryley Coal Co. Ltd. ....	Overman.....	Did employ two men at the working face without Miners' Certificates or Miners' Permits.....	Convicted.....	Fined \$10.00.....	\$ 2.50
Ryley Coal Co. Ltd. ....	Overman .....	Did employ six men in the mine at which he is Overman on an Overman's Provisional Certificate, that allows him only five men in the space of 24 hours.....	Convicted.....	Fined \$15.00.....	\$ 3.50
Ryley Coal Co. Ltd. ....	Miner.....	Did work at the working face without a Miner's Certificate or Miner's Permit.....	Convicted.....	Fined \$5.00.....	\$ 3.50
Ryley Coal Co. Ltd. ....	Miner.....	Did work at the coal face in the mine without a Miner's Certificate or Miner's Permit.....	Convicted.....	Fined \$5.00.....	\$ 3.50

NUMBER OF MINES OPENED, RE-OPENED, CLOSED AND ABANDONED ACCORDING  
TO AREAS AND KIND OF COAL, DURING THE YEAR

Director of Mines—John Crawford, Provincial Building, Edmonton, Alberta. Telephone 22698.  
Assistant to the Director of Mines—J. A. Dutton, Provincial Building, Edmonton, Alberta. Telephone 22889.

Electrical Inspector of Mines—Burton Tait, Provincial Building, Edmonton, Alberta. Telephone 28614.

Inspection District	Area	Area No.	Character of Coal	No. of mines in operation at Dec. 31, 1949				Name and Address of District and Assistant District Inspector of Mines
				Mines opened during the year	Mines re-opened during the year	Mines closed during the year	Mines abandoned during the year	
Edmonton-Camrose	Camrose	5	Sub-bituminous	5	2	2	2	J. Thomson.
	Castor	8	Sub-bituminous	19	6	2	3	3 Provincial Building,
	Edmonton	15	Sub-bituminous	24	1	5	8	3 Edmonton, Alberta,
	Halcourt	18	Bituminous	1	1	1	—	4 Telephone 28612.
	Pembina	31	Sub-bituminous	11	4	2	6	1
	Prairie Creek	33	Bituminous	1	1	1	2	—
	Rochester	35	Sub-bituminous	1	—	—	—	—
	Slave	38a	Sub-bituminous	—	—	—	1	—
	Tofield	42	Sub-bituminous	5	—	—	—	—
	Westlock	45	Sub-bituminous	3	—	1	1	—
	Wetaskiwin	46	Sub-bituminous	1	—	—	—	—
	Whitecourt	47	Sub-bituminous	2	—	1	3	1
Calgary	No Area	—	Bituminous	—	—	—	1	—
	Carbon	6	Sub-bituminous	3	—	1	—	1 W. E. G. Hall,
	Cascade	7	Bituminous	3	—	—	—	New Courthouse Bldg.
	Highwood	19	Bituminous	1	—	—	2	Calgary, Alberta,
	Morley	23	Bituminous	—	—	—	1	Telephone M 842-84.
	Nordegg	25	Bituminous	1	—	—	—	—
	Pekisko	30	Bituminous	1	—	—	—	—
Edson	Saunders	36	Bituminous	2	—	—	—	—
	Coalspur	11	Bituminous	5	1	2	1	A. Muir,
	Mountain Park	24	Bituminous	4	—	—	—	1 Edson, Alberta, Telephone 35.
	—	12	—	—	—	—	—	—
Blairmore	Crowsnest	13	Bituminous	7	1	—	—	J. D. B. Brown,
	Pincher	32	Bituminous	1	—	—	—	A. L. Lister, Blairmore, Alberta, Telephone 70.
Drumheller-Lethbridge	Ardley	1	Sub-bituminous	7	—	7	8	3 James Horne,
	Big Valley	2	Sub-bituminous	2	1	—	—	1 Robert Shaw,
	Carbon	6	Sub-bituminous	8	—	5	3	1 Drumheller, Alberta, Telephone 413.
	Castor	8	Sub-bituminous	8	1	4	3	—
	Drumheller	14	Sub-bituminous	23	2	3	4	6
	Gleichen	17	Sub-bituminous	4	—	2	2	—
	Sheerness	38	Sub-bituminous	6	—	5	3	—
	Brooks	3	Sub-bituminous	1	—	1	1	1 E. H. Morgan,
	Champion	9	Sub-bituminous	3	—	2	1	Lethbridge, Alberta,
	Lethbridge	20	Bituminous	8	—	1	1	1 Telephone 3325.
	Milk River	22	Sub-bituminous	1	—	—	—	2
	Pakowki	28	Sub-bituminous	1	—	1	—	—
	Redcliff	34	Sub-bituminous	2	1	—	—	—
	Taber	41	Sub-bituminous	5	1	2	3	—
Total				180	21	51	60	29

## THE MINES DIVISION

## BOARD OF EXAMINERS

The Provincial Board of Examiners during the year 1949, consisted of the following:

As representing:

- (a) The Mine Inspectorate: John Crawford, Director of Mines.
- (b) Managers: A. C. Dunn and William Wilson.
- (c) Working Miners: Andrew Campbell and D. J. Holly.  
Secretary: Muriel Roberts.

Examinations during the year were held as follows:

For Third Class at the following centres: Blairmore, Canmore, Cadomin, Drumheller, Edmonton, Lethbridge and Nordegg, on May 31st.

For First and Second Class at the following centres: Calgary and Edmonton, on June 7th, 8th and 9th.

For Mine Surveyor at the following centres: Calgary and Edmonton, on June 9th.

For Mine Electrician at the following centres: Blairmore, Canmore, Cadomin, Drumheller, Edmonton, Lethbridge and Nordegg, on May 31st.

Twelve candidates presented themselves for examination for First Class Certificates, of whom two were successful.

Two First Class Interchange Certificates were also granted during the year.

Twenty-two candidates presented themselves for examination for Second Class Certificates, of whom eleven were successful.

Sixty-nine candidates presented themselves for examination for Third Class Certificates, of whom thirty-seven were successful.

Ten candidates presented themselves for examination for Mine Surveyors' Certificates, of whom four were successful.

Sixteen candidates presented themselves for examination for Mine Electricians' Certificates; ten for First Class, of whom six were successful and six for Second Class, of whom three were successful.

The list following herewith gives the names of successful candidates for all classes of certificates during 1949.

**LIST OF NAMES OF HOLDERS OF FIRST, SECOND AND THIRD CLASS,  
MINE SURVEYORS' AND MINE ELECTRICIANS' CERTIFICATES**

Issued by the Government of the Province of Alberta during the year 1949

**FIRST CLASS**

Name	Address	Cert. No.	Date of Issue
D'Amico, Zupito.....	Nordegg.....	3	16-7-49
Worthington, Willard T., Jr.....	Edmonton.....	4	16-7-49

**FIRST CLASS INTERCHANGE**

Dinsdale, William.....	Telkwa, B.C.....	1	14-5-49
Platt, John.....	Calgary.....	2	14-5-49

**SECOND CLASS**

Bell, William.....	Canmore.....	7	16-7-49
Comin, Silvio.....	Bellevue.....	6	16-7-49
Crawford, James.....	Spruce Grove.....	9	16-7-49
Davey, William H.....	Michel, B.C.....	4	16-7-49
Fry, George H.....	Hillcrest.....	3	16-7-49
Hooyberg, Adrian.....	Blairmore.....	2	16-7-49
James, William.....	Mercoal.....	10	16-7-49
Louhela, Sulo.....	Canmore.....	1	16-7-49
Mattson, Ailie E.....	Bellevue.....	11	16-7-49
Peta, Frank.....	Lethbridge.....	8	16-7-49
Stene, Alexander.....	Mountain Park.....	5	16-7-49

## THIRD CLASS

Name	Address	Cert. No.	Date of Issue
Anderson, George E.....	East Coulee.....	31	16-7-49
Aloisio, Edward.....	Robb.....	33	16-7-49
Barich, John L.....	Drumheller.....	32	16-7-49
Berze, John.....	Hillcrest.....	26	16-7-49
Biro, Geza J.....	Newcastle.....	14	16-7-49
Bish, Homer F.....	Forestburg.....	23	16-7-49
Bosetti, Renato.....	Mercoal.....	3	16-7-49
Brown, James W.....	Coal Creek, B.C.....	2	16-7-49
Cumber, Ernest G.....	Grande Prairie.....	36	16-7-49
Dunn, Robert A.....	Edmonton.....	20	16-7-49
Fleischer, Carl H.....	Rosebud.....	28	16-7-49
Fortunaso, Joseph A.....	Bellevue.....	13	16-7-49
Herman, William M.....	East Coulee.....	1	16-7-49
Hluska, Walter.....	Robb.....	11	16-7-49
Hooyberg, Adrian.....	Blairmore.....	9	16-7-49
Ironmonger, Samuel.....	Hillcrest.....	37	16-7-49
Iwanichuk, John.....	Midlandvale.....	30	16-7-49
Jackson, Richard A.....	Canmore.....	15	16-7-49
Joy, Arnold J. S.....	Cadomin.....	25	16-7-49
Kuban, Stephen J.....	Bellevue.....	16	16-7-49
Kwiczak, William.....	Drumheller.....	19	16-7-49
Makin, John.....	Hillcrest.....	29	16-7-49
McLafferty, Hugh P.....	Bellevue.....	12	16-7-49
Neumann, Theodore O.....	Cadomin.....	4	16-7-49
Olah, Julius.....	Shaughnessy.....	8	16-7-49
Pasechnik, Archie.....	Nordegg.....	24	16-7-49
Pierzchala, John T.....	Hillcrest.....	18	16-7-49
Premoroko, Peter.....	East Coulee.....	21	16-7-49
Pullen, Peter F.....	Alexo.....	6	16-7-49
Rasmussen, Harold M.....	Bremerton, Wash.....	109	28-6-49
Rock, Millan.....	Cadomin.....	27	16-7-49
Rusben, Ittao J.....	Shaughnessy.....	22	16-7-49
Shields, Alexander M.....	Midlandville.....	10	16-7-49
Samis, Stewart M.....	Namao.....	34	16-7-49
Waggoner, Bernard.....	East Coulee.....	7	16-7-49
Wheat, Kenneth C.....	Mercoal.....	5	16-7-49
Zayezierski, Casey.....	Luscar.....	17	16-7-49
Zboya, Peter S.....	Canmore.....	35	16-7-49

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## MINE SURVEYOR

Clyburn, Norman S.....	Cadomin.....	3	16-7-49
McConnell, Edward W.....	Edmonton.....	4	16-7-49
Platt, John.....	Calgary.....	2	16-7-49
Smith, Terence.....	East Coulee.....	1	16-7-49

## FIRST CLASS MINE ELECTRICIAN

Johnson, John C.....	Lethbridge.....	1	16-7-49
Montalbetti, Ernest.....	Coleman.....	2	16-7-49
Roome, Ronald.....	Mountain Park.....	3	16-7-49
Sikora, Joseph J.....	Coleman.....	5	16-7-49
Siray, Louis.....	Shaughnessy.....	6	16-7-49
Zukewich, William.....	Mercoal.....	4	16-7-49

## SECOND CLASS MINE ELECTRICIAN

Auger, Norman L.....	Naemine.....	1	16-7-49
Holman, Jonathan P.....	Robb.....	2	16-7-49
Jackson, John.....	Edmonton.....	3	16-7-49

## THE MINES DIVISION

## STRIP MINE BOARD OF EXAMINERS

The Board of Examiners during the year 1949 consisted of the following:

As representing:

- (a) The Mine Inspectorate: J. A. Dutton, Assistant to the Director of Mines.
  - (b) Strip Mine Managers: G. A. Wiggan and W. F. Stevenson.
  - (c) Strip Mine Workers: S. Nicholson and L. Gryschuk.
- Secretary: Muriel Roberts.

There were no examinations held during the year.

The Board met twice to deal with applications for certificates without examination, which were recommended to the Director of Mines for issuance under Section 5(d) of the Regulations Governing the Operations of Strip Mines.

**LIST OF NAMES OF HOLDERS OF STRIP MINE MANAGERS', FOREMEN'S  
AND BLASTERS' CERTIFICATES**

Issued by the Government of the Province of Alberta during the year 1949

**STRIP MINE MANAGER**

Name	Address	Cert. No.	Date of Issue
Brown, John D. B.....	Blairmore.....	26	19-8-49
Burton, John T.....	East Coulee.....	1	7-5-49
Campbell, Victor W.....	Grassy Lake.....	27	19-8-49
Cook, Carlton C.....	Taber.....	2	7-5-49
Cote, Paul H.....	Edmonton.....	3	7-5-49
Cowie, James L.....	Blairmore.....	28	19-8-49
Crawford, Alexander.....	Edmonton.....	4	7-5-49
D'Amico, Zupito.....	Nordegg.....	29	19-8-49
Dick, William J.....	Edmonton.....	40	19-8-49
Donkin, Frederick I.....	Michel, B.C.....	5	7-5-49
Garniott, Harry N.....	Eyremore.....	6	7-5-49
Hamilton, Allan.....	Drumheller.....	30	19-8-49
Harrigan, Michael A.....	Cadomin.....	7	7-5-49
Henderson, Austin J.....	Cadomin.....	31	19-8-49
Henderson, David C.....	Castor.....	8	7-5-49
Kapach, Michael S.....	Luscar.....	24	7-5-49
Livingstone, Robert D.....	Lethbridge.....	9	7-5-49
Marshall, Thomas.....	Cluny.....	32	19-8-49
Melson, Philip.....	East Coulee.....	10	7-5-49
Miller, David.....	Bellevue.....	25	7-5-49
Mingle, Wesley R.....	Calgary.....	11	7-5-49
Montgomery, Brockwell L.....	Calgary.....	33	19-8-49
Mrokvia, Victor, Jr.....	Canmore.....	12	7-5-49
Macaulay, Angus G.....	Drumheller.....	34	19-8-49
McDonald, Duncan.....	Gregg River.....	13	7-5-49
McDonald, Malcolm M.....	Taber.....	14	7-5-49
McLeod, John A.....	Vancouver, B.C.....	15	7-5-49
McMullen, Arthur.....	Nordegg.....	35	19-8-49
Norton, Robert E.....	Mountain Park.....	16	7-5-49
Sandino, Joseph A.....	Drumheller.....	17	7-5-49
Slominsky, William A.....	Calgary.....	36	19-8-49
Smart, Robert K.....	Nanaimo, B.C.....	18	7-5-49
Smith, Terence.....	East Coulee.....	19	7-5-49
Tonge, Reginald G.....	Blairmore.....	20	7-5-49
Wanner, George.....	Eyremore.....	21	7-5-49
Wilson, Andrew.....	Coleman.....	22	7-5-49
Wilton-Clark, Harry.....	Fernie, B.C.....	37	19-8-49
Worthington, Willard T., Sr.....	Edmonton.....	23	7-5-49
Worthington, Willard T., Jr.....	Edmonton.....	38	19-8-49
Young, David B.....	Cadomin.....	39	19-8-49

## FOREMAN

Name	Address	Cert. No.	Date of Issue
Appleby, William S.	Rosedale	24	19-8-49
Bain, Alexander	Coleman	1	7-5-49
Belcourt, Ernest	Tofield	2	7-5-49
Bishop, Bert H.	Sheerness	3	7-5-49
Bohle, Otto H.	Hillcrest	25	19-8-49
Bryant, Ernest A.	Wabamun	41	19-8-49
Carson, James	Forestburg	4	7-5-49
Carter, Leo R.	Alix	5	7-5-49
Christiaens, Cyrille	Cardiff	6	7-5-49
Coleman, Ben	Calgary	26	19-8-49
Coleman, Donald D.	Coleman	27	19-8-49
Ells, Douglas R.	Edmonton	28	19-8-49
Flanders, Arthur L.	Eyremore	7	7-5-49
Fletcher, Earl	Castor	8	7-5-49
Gariott, Clarence F.	High River	9	7-5-49
Harper, James	Bellevue	29	19-8-49
Heaston, Franklin J.	Sheerness	40	20-9-49
Herman, John R.	Cadomin	30	19-8-49
Higdon, Augustus A.	Nacmine	10	7-5-49
Logan, Thomas C.	Calgary	11	7-5-49
Martin, William G.	Delburne	31	19-8-49
Meers, Kenneth G.	Eyremore	12	7-5-49
Mortenson, Niels	Tofield	13	7-5-49
McDevitt, James J.	Edmonton	32	19-8-49
MacLachlan, Charles F.	Edmonton	14	7-5-49
O'Hanlon, Arthur J.	Edmonton	15	7-5-49
Ozubko, Steve	Michel, B.C.	33	19-8-49
Patterson, John B.	Natal, B.C.	34	19-8-49
Quinn, Patrick	Calgary	16	7-5-49
Roscovich, Frank	Stereo	35	19-8-49
Schnepf, Karl J.	Delburne	36	19-8-49
Schymizek, John	Big Valley	37	19-8-49
Stratton, Robert	Robb	17	7-5-49
Sward, Henry	Sheerness	18	7-5-49
Vejprava, Frank P.	Frank	38	19-8-49
Voice, Roy	Edmonton	39	19-8-49
Vranas, George	Morinville	19	7-5-49
Walker, Harold E.	Sheerness	20	7-5-49
Wanner, George	Wabamun	21	7-5-49
Whittaker, Ora W.	Beynon	22	7-5-49
Wirove, Joseph	Eyremore	23	7-5-49

## BLASTER

Anderson, Olaf	Camrose	1	7-5-49
Baluch, Steve	Mountain Park	2	7-5-49
Bokenfohr, Herman	Cardiff	3	7-5-49
Craig, Thomas	Hillcrest	8	19-8-49
Krkosky, Martin	Blairmore	7	7-5-49
Mottl, Orly	Blairmore	4	7-5-49
Rizzi, Peter S.	Wabamun	5	7-5-49
Schafers, Emil	Morinville	6	7-5-49
Schymizek, Frank	Fallis	9	19-8-49
Vaughn, John B.	Creston, B.C.	10	19-8-49

## THE MINES DIVISION

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## FIRST CLASS CERTIFICATES

Marks obtainable 200

Marks required 120

Time— $3\frac{1}{2}$  hours

Paper No. 1

## THE COAL MINES REGULATION ACT

Values

1. What are the provisions of Section 6 of the above Act, regarding additional powers of Inspectors? .....	18
2. What are the requirements of the Act regarding the commencement of mining operations, and development methods? .....	22
3. What are the requirements of Electrical Regulations regarding the appointment and duties of a mine electrician? .....	20
4. What are the requirements of the Act regarding manholes on haulages, inclines and other roads, also regarding the providing of signals? .....	22
5. What are the provisions of the Act with reference to the appointment of inspectors by workmen? .....	22
6. What does the Act state regarding the appointment of examiners:	
(a) As to districts and their size; .....	22
(b) The duties of examiners and additional duty of examiners? .....	22
7. (a) What are the provisions of the Act as to outlets to the surface;	
(b) Action necessary to prevent mine working in contravention thereof? .....	22
8. What do the General Rules specify regarding telephones in shafts and other parts of the mine? .....	18
9. What do the Regulations require regarding the carrying of first aid kits, and the maintenance of first aid kits? .....	18
10. (a) What do the General Rules state with reference to riding on cars or locomotives?	
(b) Explosives on conveyances? .....	16
(c) Handling of cars? .....	

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCHEXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
June 7, 8 and 9, 1949

## FIRST CLASS CERTIFICATES

Marks obtainable 200

Marks required 120

Time— $3\frac{1}{2}$  hours

Paper No. 2

## GASES, SHOT-FIRING AND SAFETY LAMPS

Values

1. (a) What is meant by the term "Diffusion of Gases"? .....	
(b) When a volume of $\text{CO}^2$ is brought in contact with a volume of $\text{CH}^4$ , show by calculation how many cubic feet of the $\text{CO}^2$ will pass into the volume of $\text{CH}^4$ , whilst ten cubic feet of the $\text{CH}^4$ passes into the volume of $\text{CO}^2$ ? .....	17
2. In the operation of a mine that you are manager of, (the mine may be considered flat or pitching) you have a very gassy condition in the development places. Would you use Auxiliary-fans? If so, describe the manner of using them, showing their effect on the ventilation of the whole of the mine, and your reasons for deciding to use these fans. If you do not favour using Auxiliary fans, give your reasons, and a description of the manner you would handle the ventilation of the whole mine. ....	25
3. By measuring, it is found that 125,000 cu. ft. per min. of air is entering a mine, and the quantity leaving the mine is 133,000 cu. ft. per min. The mine is ventilated by a forcing-fan, which produces a ventilating pressure of 3 inches water-gauge. The Barometer reading is 27.6 inches, the temperature in the return is 50 degrees Fahrenheit, and the outside temperature is 20 degrees Fahrenheit. What is the volume of gases given off by this mine cu. ft. per min.? What is the percentage of gases in the return airway? .....	17
4. The M.S.A. Methane Tester is in use in most of the progressive mines in Alberta.	
(a) Give a general description as to the principle that causes it to function.	
(b) Describe the manner of using it in a mine. ....	22
5. How do you account for Spontaneous Combustion being more common in some seams than in others? How can the dangers be reduced by certain methods of working? .....	20

6. The analysis of a sample of dust from an underground roadway shows the percentage figures of the following constituents: Moisture, Volatile matter, Carbon and Ash. Explain in your own way, what bearing each of these would have in helping you to decide as to whether the dust sample indicated a dangerous roadway condition..... 17
7. A roadway sample of dust has been properly sieved in accordance with the Rock-dusting Regulations. A portion of this sample weighing 40 grams is placed into a specific gravity flask, and on reading the graduated scale it is found to have displaced 20 cubic centimeters of Alcohol. The specific gravity of the coal in this mine is 1.4, but has an Ash content of 15%. The specific gravity of the rock dust used is 2.8, and is completely incombustible. What is the percentage of incombustible matter in the sample, if the Ash in the coal has the same specific gravity as the rock dust?..... 22
8. (a) Describe the manner in which the scales are graduated on the Fahrenheit and Centigrade Thermometers.  
 (b) At what temperature is the reading on both thermometers identically the same?  
 (c) At what temperature does the reading on one equal three times the reading on the other?..... 18
9. (a) Describe the various methods by which coal-dust can be rendered harmless.  
 (b) Describe the manner in which each of these methods is applied.  
 (c) Express your opinion for and against each of these methods, and give the reasons for your opinion..... 22
10. Define the Cardox blasting device. What does the Regulations for the Province of Alberta say with regard to firing shots with Cardox?..... 20

## GOVERNMENT OF THE PROVINCE OF ALBERTA

## MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## FIRST CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 3Marks required 120  
Time— $3\frac{1}{2}$  hours

## VENTILATION

Values

1. State the laws of friction as applied to the flow of air through the mine and deduce the expression  $PA = KSV^2$ , explaining the meaning of each symbol..... 22
2. 600 foot shafts are sunk to a coal seam pitching 40 degrees. The seam is being worked east and west from the shaft bottom and is ventilated by two natural splits. Sketch and describe a system of reversing the direction of ventilation in one section of the mine without interfering with the direction of the ventilation in the other section of the mine, or the surface arrangements. State the advantages and disadvantages of the system..... 20
3. How would you determine the quantity of air required for ventilating a modern mine? Give suitable figures for a fiery mine employing 400 men underground. ..... 24
4. 12,000 cu. ft. of air per minute passes through an airway 4 ft. high and 8 ft. wide, with a water gauge of 3.5 inches. The road is afterwards brushed by taking down 4 ft. of the roof along the full length of the roadway, and the quantity is increased to 20,000 cu. ft. per minute. Give the velocity and pressure for the altered quantity. ..... 22
5. A current of 200,000 cu. ft. of air per minute is produced by a fan at 4 inches of water gauge. Calculate the air horse power. How would you endeavour to increase this quantity by 30%? ..... 12
6. Describe an air crossing such as might be built in a seam 6 feet thick at the junction of two roadways that meet at right angles, and explain the particulars in which the construction would differ if the site were in a goaf instead of solid ground. ..... 18
7. The thermometer is 60 degrees Fahrenheit, the barometer 25 inches, the water-gauge 2 inches and the fan is producing 165,000 cu. ft. of air per minute. The fan and motor combined have an efficiency of 65%. Calculate the in-pot to the motor in horse-power. The velocity of the air at the evasse of the fan in 600 feet. What portion of the horse-power supplied is being used up in producing this velocity? ..... 20
8. Give a description of a ventilating fan installation suitable for a large bituminous mine with a current of 200,000 cu. ft. of air per minute at a water-gauge of 5 inches. Mention all important details of the installation, particularly the means of reversing the air current. What method of drive would you use for a fan of this capacity? ..... 24
9. Decision has been made to install an electrically driven booster fan in a mine where safety lamps are required to be used, as a general aid to the main ventilating fan. The coal seam is flat, six feet thickness, and developed on the two entry system. State where you would install the fan and enumerate the safety features you would employ for the installation. ..... 20

10. The water-gauge reading obtained from a pitot tube is one inch when placed in the fan drift. The weight of a cubic foot of air is .08 pounds. Calculate the velocity of the air in the fan drift.....

18

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH  
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
June 7, 8 and 9, 1949  
FIRST CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 4

Marks required 120  
Time- $3\frac{1}{2}$  hours

PRACTICAL WORK, FIRST AID, MINE RESCUE

Values

1. Compare the following types of locomotives to be used for main line haulage purposes underground: Electric Trolley, Electric Battery, Compressed Air, Diesel. State the advantages, and disadvantages of each type, and compare them with reference to safety in operation, cost of installation, and cost of operation and maintenance. Which type would you select, and give reasons for your choice.
- (b) What safety devices are attached to or incorporated in a Diesel locomotive to permit it to be operated underground in any coal mine?..... 28
2. Sketch and describe suitable methods of extracting pillars in the following instances:
  - (a) A flat seam, 6 feet in height, subject to squeeze.
  - (b) A seam inclined at 10 degrees, 10 feet in height. Assume your own conditions, and show systems of timbering, and precautions to protect workmen at the face, .....
3. Sketch and describe a section of a mine in a flat seam to produce 200 tons per day using mobile loaders. The seam is 6 feet in height, with a moderately hard floor. The roof consists of 2 feet of hard sandstone, and above this is 8 feet of medium hard shale. Describe a cycle of operations, showing the time for each operation, and show details of car supply for the mobile loader. .... 25
4. An area of a coal seam is to be mined beneath an important building on the surface. It has been agreed to leave 60% of the coal in place to support the building. The rooms are 20 feet in width, and the cross cuts are 10 feet wide. The pillars to be formed are to be twice as long as they are wide. What are the dimensions of the pillars? .....
5. A cross measure tunnel is to be driven through hard sandstone, and hard shales to connect two seams 800 feet apart. The tunnel will be 8 feet high and 10 feet wide.
  - (a) What equipment would you employ at a tunnel face?
  - (b) Describe a 24 hour cycle of operations at the face.
  - (c) State the type of explosive you would use, and give the approximate amount used per yard advance.
  - (d) Sketch two "cuts", or patterns of drilling you could use to shoot the face of the tunnel.
  - (e) Could the same type of explosive be used throughout the tunnel? .....
6. Sketch and describe a H.H. Inhalator, and state why the contents of the air cylinders do not contain pure oxygen..... 14
7. Describe with sketches any type of tightening, or tension arrangement you would use for an endless rope system on a haulage road 4,000 feet in length. The road is single track throughout, and a trip of ten cars is hauled in, and a trip of loads is hauled out by reversing the engine which is situated on the out-bye end of the road. Show location of the tension arrangement. Would one be sufficient, and if not, where would you place the second one? Give reasons..... 20
8. An entry has approached to within 160 feet of a large body of water contained in some old workings. The known head of water is 360 feet. It is proposed to tap, and drain this water off gradually. Show by means of sketches any suitable method you would employ to drill and tap this water, and state the precautions you would employ to ensure the safety of the men employed at this work, and of those employed in other sections of the mine.... 20
9. In driving a level in a seam of coal a fault was encountered. What are the usual indications by which it may be possible to decide upon the kind of fault encountered?..... 20
10. If the total output produced at a colliery during a period of twelve months be 405,120 tons, by a total of 313 persons employed, who worked on an average 4.83 shifts per week, what is the average output per man shift in tons to the second decimal?..... 10

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

FIRST CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 5

Marks required 120  
Time— $3\frac{1}{2}$  hours

MACHINERY

Values

- |     |  |    |
|-----|--|----|
| 1.  | A three phase 2200 volt transmission line is run with No. 000 bare copper wire having a resistance of 0.063 ohm per 1,000 feet of single wire. The line is 1 mile long and power is fed to the line at the rate of 1,000 kilowatts. If the power factor is 0.85, what is the voltage loss in transmission, and what power is actually delivered by the line?.....  | 20 |
| 2.  | What weight can be raised by a geared steam hoist with two double acting cylinders 12 inches in diameter, stroke 16 inches, mean effective steam pressure on pistons 90 pounds per sq. in., maximum engine speed 140 revolutions per minute? The pinion on the engine shaft has 16 teeth and the gear on the drum shaft has 192 teeth, diameter of rope drum is 4 ft. 6 in. and overall efficiency is 60%......  | 24 |
| 3.  | A slope 1,600 feet in length and driven on a 14 degree pitch is being extended. Water is issuing from the face at a rate of 140 gals. per minute. Give complete details of the arrangements you would make to keep the working face free from water. What type and size of pump would you use and what power would be required to do the pumping? The mine is free from gas and both electricity and compressed air are available for power purposes.....  | 24 |
| 4.  | (a) What is the tensile stress in pounds per sq. in. on a round steel stay bar $1\frac{1}{2}$ inches in diameter with threaded ends, if the thread is 0.08 inches deep and load on bar is 20,000 pounds?<br>(b) If the steel has an ultimate strength of 60,000 pounds per sq. in., what is the safety factor in the above case?.....  | 14 |
| 5.  | (a) Why is a large diameter head wheel preferred to one of smaller diameter?<br>(b) What do you understand by "fleet angle"?<br>(c) What are the objections to a wide fleet angle?<br>(d) How may the fleet angle be kept within proper limits?<br>(e) Where two hoisting ropes are used, one over and the other under the drum, which has the longer life and why?.....   | 16 |
| 6.  | In the course of a 12 hour test run, a steam boiler evaporates 57,500 pounds of water from a feed water temperature of 148 degrees F. into dry steam at 165 pounds per sq. in. in gauge pressure. Weight of coal fired during this period is 9,600 pounds. What percentage of the heat in the fuel is actually used in converting the water into steam if the heat value of the coal is 9,300 b.t.u's. per pound, and the total heat in one pound of steam at 165 pounds per sq. in. gauge pressure is 1,196.9 b.t.u's.?.....  | 24 |
| 7.  | (a) The L.P. cylinder of a two stage air compressor is 28 inches in diameter and the H.P. cylinder is 16 inches in diameter. Stroke is 48 inches and speed is 100 r.p.m. If the barometer reads 28 inches and discharge pressure to the receiver is 110 pounds per sq. in. gauge, what is the capacity of this compressor in cubic feet of free air minute, and in cubic feet of air at receiver pressure?<br>(b) The foregoing assumes compression to be approximately isothermal. If it approaches more nearly to adiabatic compression, what effect would this have on the air and what dangerous condition might arise?..... | 20 |
| 8.  | The output of a mine is 1,000 tons per day. This is moved in 7 hours by endless rope haulage running at 5 miles per hour in cars which hold $1\frac{1}{2}$ tons of coal and weigh $\frac{3}{4}$ ton when empty. The rope weighs 2 pounds per foot. The haulage is $1\frac{1}{4}$ miles long and level. Taking friction as $1/40$ of the load and assuming rate of output is uniform, find the horse power required to move this haulage system.....  | 24 |
| 9.  | (a) How does the resistance of an electric conductor vary with length and with cross sectional area?<br>(b) What size conductor should be used to carry a current of 30 amps. at 220 volts to a D.C. motor situated 1,800 feet from the source of current, if the line drop is not to exceed 10 volts?.....  | 16 |
| 10. | Sketch and describe the type of safety valve you would adopt on the receiver of an air compressor.....   | 18 |

## THE MINES DIVISION

GOVERNMENT OF THE PROVINCE OF ALBERTA

## MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## FIRST CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 6Marks required 12<sup>0</sup>  
Time—3½ hours

## SURVEYING, LEVELLING AND GEOLOGY

Values

- From a main entry having a direction of N 30° 00' W two room entries are driven, the first on a bearing of N 60° 00' E and the second, or inbye one, on a bearing of N 55° 00' E and distant from each other 600 feet. At a point on the first room entry, 800 feet distant from the Main entry a narrow room is turned off on a bearing of N 25° 00' W. Determine by calculation the distance from the Main entry at which the narrow room will intersect the second room entry.....
- Explain fully with diagram how you would place hubs or sights to drive a mine road on a curve having a radius of 60 feet. It is to be assumed that no surveying instrument is available.....
- It is proposed to install a locomotive in a mine hitherto worked by horse haulage. Discuss the various items you would have to consider.....
- A traverse has been made along a mine roadway, stations being placed 100 feet apart on varied courses. Angles have been read off on the vertical circle, the transit being sighted to a rod corresponding in height to telescope level. These angles are respectively:

2° 00' dip

1° 50' dip

1° 25' rise

0° 45' rise

0° 00' level

45

35

25

Convert these notes to the customary bookings as if taken with a level thus:

Sta. BS IS FS HI Elev

40

and give average grade from starting to finishing points.....

40

- Enumerate the errors which may be made in transit work under the headings of Instrumental, Personal and Natural.....
- Make a sectional sketch showing in general the origin and subsequent effect of geological forces from the Rocky Mountains to the Plains of Alberta and indicate by name the principal horizons that are coal bearing.....
- A plan as required under the Coal Mines Regulation Act must be handed in to the presiding examiners with the answers to this paper.....
- A profile of an underground levelling as required under the Coal Mines Regulation Act must be handed in to the presiding examiners with the answers to this paper.....

25

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5

5

GOVERNMENT OF THE PROVINCE OF ALBERTA

## MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## SECOND CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 1Marks required 100  
Time—3½ hours

## THE COAL MINES REGULATION ACT

Values

- What are the requirements of the above Act with reference to:  
(a) appointment of examiners;  
(b) districts for examiners?.....
- What are the provisions of the above Act with reference to hours of employment below ground?.....
- What are the requirements of Section 140 of The Coal Mines Regulation Act with reference to size of main conveyor roads, travelling on same, escape roads and signal equipment when certain conveyors are used?.....
- What are the provisions of Section 151 of the above Act, with reference to the duties of the overman?.....
- What are the provisions of Section 109 of the Act, regarding ventilation?.....

20

20

16

27

25

6. (a) What is required by the Regulations as to first aid kits and first aid requirements; and (b) as to keeping tipplers and buildings clear of coal dust?.....	18
7. What are the requirements of Rule 21 of Section 149 of the Act, with reference to the person in charge of haulage roads.....	15
8. What are the requirements of the Act regarding the inspection of mines in which inflammable gas has been found and the other inspections required during the working shifts?.....	18
9. What are the requirements of the Act as to persons in charge of engines or machinery for conveying persons in a mine?.....	20
10. What are the requirements with reference to: (a) timbering; (b) powers of the District Inspector if he considers the method of timbering unsatisfactory; and (c) steps the manager may take regarding any order given by the District Inspector?....	21

**GOVERNMENT OF THE PROVINCE OF ALBERTA**  
**MINES BRANCH**

**EXAMINATIONS UNDER THE COAL MINES REGULATION ACT**  
June 7, 8 and 9, 1949

**SECOND CLASS CERTIFICATES**

Marks obtainable 200  
Paper No. 2

Marks required 100  
Time— $3\frac{1}{2}$  hours

**GASES, SHOT-FIRING AND SAFETY LAMPS AND VENTILATION**

Values

1. Two air-ways are, (A) 4,000 yards long, (B) 900 yards long, the air-ways each having the same cross-section, same perimeter, each receiving air from the same intake, and subject to the same water-gauge. If 20,000 cubic feet of air is circulating in (A) split, what quantity is circulating in (B) split?.....	16
2. What do you consider to be the safe conditions to be fulfilled by an efficient flame safety lamp as used in this province?.....	24
3. If 29,100 cubic feet air enters a split in which 60 persons are employed, and 30,000 cubic feet returns from the split, the increase quantity being due to the addition of Methane, what percentage of Methane is in the return air?.....	15
4. Describe clearly what is meant by "Sheathed Explosives", and point out the advantages and disadvantages of the use of sheathed explosives.....	20
5. The velocity of air passing in a triangular air-way having sides measuring respectively 10 feet, 12 feet, and 16 feet, is 500 feet per minute. What is the quantity of air flowing through the air-way per minute?.....	18
6. A mine producing 100,000 cubic feet of air per minute has a 2.5 inch water-gauge. (a) what will be the effective horse-power and water-gauge if by increasing the speed of fan, the volume of air is increased to 150,000 cubic feet of air per minute, conditions in the mine remaining the same? (b) If the speed of the fan producing 100,000 cubic feet of air per minute was 100 R.P.M., what will be the speed of the fan in R.P.M. for 150,000 cubic feet of air per minute?.....	22
7. What is a permitted explosive, and what are the desirable exacting requirements of a permitted explosive? .....	20
8. Find the percentage and weight of Hydrogen contained in 10 pounds of Methane.....	20
9. The area of section and the pressure remaining the same, if the length of an air-way is doubled, how will this affect the velocity? Assuming the velocity was 10 feet per second in the first case, what will be the velocity when the length of the air-way is doubled?.....	25
10. What is the length of the perimeter of a circular air-way to enclose a sectional area of 100 square feet?.....	20

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## SECOND CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 3

Marks required 100  
Time— $3\frac{1}{2}$  hours

## PRACTICAL WORK, FIRST AID AND MINE RESCUE WORK

	Values
1. In an $8\frac{1}{2}$ ft. seam pitching 37 degrees, rooms are driven 45 ft. in width. Near the centre of the seam is a 6 inch dirt band in which a cut is made to a depth of 6 ft. with compressed air machines. How many men do you consider necessary to clean up and timber each room in an eight hour shift. Assuming 27 cubie ft. to a ton, calculate how many rooms would be necessary to be cut each day to provide for an output of approximately 1,200 tons. ....	22
2. (a) What is a squeeze and what causes it?, (b) What would you do to check its progress? (c) At what stage of its progress would you withdraw the men?.....	25
3. What are the advantages and disadvantages of the long wall retreating system of mining coal? .....	20
4. Does pillar work require more attention by mine officials than places advancing in the solid coal, and if so, why?.....	18
5. If a boom 5 ft. between the points of support bears a load of 6,000 pounds uniformly distributed along its length, what will a boom of the same material and dimensions, but $7\frac{1}{2}$ ft. between the points of support bear under like conditions?.....	17
6. What would be your duty as captain of a mine rescue team while investigating a mine explosion and wearing the rescue apparatus? .....	16
7. How would you render First Aid to a person with a broken forearm in a coal mine?.....	20
8. (a) Sketch and describe the process of forepoling used in driving roads under a very tender roof. (b) Sketch and describe a three piece set of timber in a flat seam and in a seam pitching at 37 degrees.....	20
9. Sketch a loading chute as used in a pitching seam and describe the main points to be observed in its construction. ....	22
10. (a) What is a siphon? (b) Under what conditions can it be used? (c) In case a shaft 60 feet deep is located on a high mountain side, could a siphon be used to drain the shaft of water, and if not why not?.....	20

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## SECOND CLASS CERTIFICATES

Marks obtainable 200  
Paper No. 4

Marks required 100  
Time— $3\frac{1}{2}$  hours

## MACHINERY

Values

1. Locomotives, chain coal cutters, and pneumatic picks are powered by compressed air in an extensive bituminous mine. Describe (a) The equipment you would expect to find on the surface? (b) The system for conveying the compressed air to the various machines? .....	28
2. What are the units of measurement most commonly employed in electrical practice. Explain the function of each unit in an electrical system?.....	24
3. An electromotive force of 100 volts is applied to a circuit whose resistance is 12.5 ohms, calculate the current in amperes?.....	10
4. Explain what is meant by (a) annealing, and (b) tempering certain kinds of metals? Outline the process of annealing and tempering?.....	24
5. Two 4" diameter double acting pumps discharge into a main sump which has a capacity of 200,000 gals., from the main sump a 9" diameter double acting pump discharges the water outside. How long will it take to empty the sump when full, if the three pumps are started simultaneously? Assume an effective speed of 80 feet per minute and a efficiency of 80% for each pump. ....	22
6. On examining a shaft hoisting rope (a) where would you look for the most wear? (b) How might this wear be reduced should it be unusually rapid?.....	22

7. The gravity and friction load of a trip of cars on a slope is 1,500 lbs. If the actual expenditure of power on the trip is 660,000 foot lbs. per minute, what is the speed of the trip in miles per hour?.....	20
8. What are the advantages and disadvantages of coal cutting machines?.....	20
9. (a) What is the function of a boiler? (b) Explain the difference between a fire tube and a water tube boiler? (c) Under what circumstances are water tube boilers preferred?.....	20
10. A man using chain blocks raises a load of $1\frac{1}{2}$ tons by applying a force of 50 lbs. on the chain. What is the mechanical advantage?.....	10

## GOVERNMENT OF THE PROVINCE OF ALBERTA

## MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 7, 8 and 9, 1949

## SECOND CLASS CERTIFICATES

Marks obtainable 200

Paper No. 5

Marks required 100

Time— $3\frac{1}{2}$  hours

## SURVEYING, LEVELLING AND GEOLOGY

Values

1. On a scale of 1 inch to 100 feet, plot the following notes and give the bearing and length of tie line from Station 1 to Station 5, also the area enclosed in acres.

Station	Azimuth	Horizontal Distance	
1-2	60°00'	200 ft.	
2-3	100°00'	170 ft.	
3-4	225°30'	140 ft.	
4-5	200°15'	80 ft.	45

2. A trestle connects the top of a tipple which is 30 feet high, with a mine slope. The trestle is 150 feet long and has an inclination of 1 in 4; the slope is 400 feet long, its inclination being 20 degrees. What depth of shaft sunk at the tipple would reach the coal seam and how far would the bottom of the shaft be from the bottom of the slope? The coal seam is level. .... 30
3. A room entry is driven on a bearing of N 50° E. Room sights are set off with a compass at right angles to the room entry. If the declination is 25 degrees East, what would be the magnetic bearing of the room sights? .... 20
4. Plot the following level notes using a horizontal scale of 1 inch to 100 feet and a vertical scale of 1 inch to 10 feet.

Station	BS	IS	FS	Elevation
1				100.0
	5.0			
2		3.0		
3				2.5
	4.0			
4		3.5		
5				5.5
	1.5			
6		5.0		
7				6.5

5. A slope has been sunk on a pitching seam and entries turned off at the bottom on the strike of the seam. At a point on this slope a cross-measure drift has been made into an underlying seam and a slope driven in this seam. How can you find out when this latter slope is down the correct distance for a cross-measure drift to hole through into the entry of the other seam. .... 25
6. Show with sketches an anticline, syncline, monocline and reversed fault. .... 12
7. Give a list of the main geological periods found in Alberta and the formations in which are found the more important coal seams worked. .... 15
8. You are running a small mine and wish to drive a curved road. Describe any method by which this can be accomplished. You have no surveying instruments. .... 18

## THE MINES DIVISION

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCHEXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

## THIRD CLASS CERTIFICATES

Marks obtainable 200		Marks required 100
Paper No. 1		Time—1½ hours
THE COAL MINES REGULATION ACT		
		Values
1. What are the requirements of Section 61 of the above Act relating to appointment of examiners, their duties and qualifications?.....		32
2. What does Section 62 say regarding size of district assigned to an Examiner?.....		20
3. What are the requirements of Section 66 regarding:		
(a) Fan required to provide ventilation;.....		18
(b) Consent of Examiner.....		12
4. What does Section 82 say regarding fencing of entrances?.....		20
5. State the requirements of Section 109 regarding ventilation in working places, etc. and the division of the mine into districts.....		25
6. What does Section 123 state regarding inspections of mines before shift commences work and inspection during shifts, in mines where gas has been found?.....		18
7. What are the requirements of Section 131, paragraph 16, regarding search for prohibited articles?.....		20
8. State the requirements of Section 132 regarding approaching accumulations of water, etc., in old workings.....		35
9. State the duties of an Examiner under Section 152.....		

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCHEXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

## THIRD CLASS CERTIFICATES

Marks obtainable 200		Marks required 100
Paper No. 2		Time—2 hours
VENTILATION		
		Values
1. State the different causes which tend to increase, or diminish the quantity of Fire Damp produced in a mine at any given time, and from what points or sources it is derived.....		22
2. Name all the appliances you know of in connection with coursing the air through the roadways and workings of a mine and state for what purpose each is used.....		24
3. Show in detail by means of sketches the construction of: (a) An Air Crossing, (b) An Air Door, (c) A Regulator, and (d) a practically air tight permanent stopping.....		26
4. Describe clearly how the quantity of air passing along an airway may be increased.....		24
5. A rectangular shaft 8 ft. x 10 ft. is an upcast. There are two landings, the first in 100 feet from the surface, the second is three hundred feet from the surface. It was observed that a puff of powder smoke travelled from the lower landing to the upper landing in 50 seconds. What is the quantity of the ventilating current?.....		24
6. What is meant by exhaust and blower fans? What conditions would render the one more efficient than the other?.....		18
7. What effect has splitting the air current on economy, safety and general health conditions?.....		24
8. If the water gauge suddenly shows a rise of half an inch without having increased the speed of the fan, what would you understand from this and what would be your movements?.....		20
9. Which airway should be the larger, the intake or the return; discuss fully.....		18

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

THIRD CLASS CERTIFICATES

Marks obtainable 200	Marks required 100
Paper No. 3	Time—1½ hours

PRACTICAL WORK

Values

- |  |  |
|--|--|
| 1. State the precautions you would adopt to safeguard the miners when extracting a Section of Pillars in a thick bituminous coal seam of high pitch which is liable to sudden outbursts of gas.....<br>2. What in your opinion are the principal precautions that should be taken to prevent explosions of gas?.....<br>3. Describe and sketch:<br>(a) a satisfactory stop block for use at the top of an incline;<br>(b) a drag for attaching to a trip of cars on an incline.....<br>4. How would you prepare a workman with a broken thigh for removal from the mine?.....<br>5. Explain the theory of a mine pump and state the parts which require frequent attention in order to keep it functioning properly.....<br>6. Considerable trouble is being experienced in the deterioration of timbers in some mines particularly on the return airways. State any methods known to you that could be used to preserve and lengthen the life of such timbers.....<br>7. You are required by the management, to make an inspection of the mine before the commencement of work at 8.00 a.m. State fully how you would make this inspection, and what observations and tests you would make.....<br>8. Why is it necessary to treat the roads in some mines with incombustible dust?.....<br>9. The timbering or lining of a hoisting shaft shows signs of collapse. State how you would temporarily secure it, and describe what measures you would adopt in renewing the timber.....<br> | 20<br>24<br>22<br>22<br>20<br>22<br>22<br>24<br>24 |
|--|--|

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

THIRD CLASS CERTIFICATES

Marks obtainable 200	Marks required 100
Paper No. 4	Time—2 hours

MINE GASES, SHOT FIRING, EXPLOSIVES, AND SAFETY LAMPS

Values

- |   |  |
|---|--|
| 1. Name the four principal gases met with in coal mines, stating which are explosive, and which non-explosive, and giving the chemical symbols of each.....<br>2. How many different kinds of explosives does the law allow to be used in any one drillhole? and the reason for same.....<br>3. Give the names of the explosives on the List of the Permitted Explosives as shown in the Coal Mines Regulation Act, and the permissible maximum charge for any one shot.....<br>4. (a) What are the principles involved in the flame type safety lamp?<br>(b) Name six essential features of a good flame type safety lamp for general work.....<br>5. Describe briefly the different "damps" known to coal miners.....<br>6. Describe the precautions necessary in general shot firing, and name some of the conditions under which you would refuse to fire a shot.....<br>7. What is the difference between the high tension and low tension detonators? and say which you would prefer and why.....<br>8. Describe fully how to test for gas with a Wolff safety lamp, and give the percentages of gas you would estimate to be present with the following heights of gas caps on the lamp: one-eighth inch, one-quarter inch, one-half inch, and three-eighths inch.....<br>9. In a mine giving off 2,250 cu. ft. of gas per minute, the volume of air entering the mine being 70,000 cu. ft. per min., what is the percentage of gas in the air current leaving the mine? and would you consider this percentage of gas dangerous?.....<br> | 30<br>20<br>20<br>30<br>20<br>20<br>20<br>20<br>20 |
|---|--|

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH  
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
June 9, 1949  
MINE SURVEYORS' CERTIFICATES

## MINE SURVEYORS' CERTIFICATES

Marks obtainable 200  
Paper No. 1

SURVEYING

Marks required 120  
Time— $3\frac{1}{2}$  hours

	Values
1. Describe and show with diagrams the general system of land survey in Western Canada and how it is tied in to the various degrees of Longitude.....	38
2. A base-line A-B, 100 feet long, is laid out on a bearing of N $35^{\circ}$ W. Sights are taken to two boreholes "C" and "D" from each end of this base-line. A to C is N $30^{\circ} 00'$ E A to D is N $82^{\circ} 21'$ E B to C is N $40^{\circ} 00'$ E B to D is S $68^{\circ} 54'$ E	
Calculate the length and bearing of a line joining boreholes C and D.....	40
3. A road is to be graded on a side hill. Said side hill slopes 12 degrees. A survey has been made and centre stakes for the road placed. At one of these points the road bed will be 20 feet vertically below the surface. The width of the road is to be 20 feet with sides sloping 1 in 1. Calculate the distance on each side of the given point on the centre line at which stakes must be set for cutting, and the cross-sectional area of excavation at this point.....	37
4. Explain with diagram the relationship between degree of curve and radius of curve. State under what circumstances you would use either the one or the other.....	27
5. A coal seam is pitching 1 in 5 and the surface is level ground. The top of a slope is located 100 feet from the coal outcrop measured in the direction of full pitch of the seam. If the slope drivage is made in the same direction, calculate the distance measured down the slope the coal seam will be intersected. The slope inclination is 1 in $2\frac{1}{2}$ .....	26
6. A large coal lease has been secured under which it is believed a good coal seam, some 500 feet deep, may be located. Describe the various steps you would take up to the point bringing a mine into production.....	27
7. A plan as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act, must be handed in to the presiding examiners with the answers to this paper.....	5

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH  
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
June 9, 1949  
MINE SURVEYORS' CERTIFICATES

Marks obtainable 200 Marks required 120  
Paper No. 2 Time— $3\frac{1}{2}$  hours

Station	BS	IS	FS	Values
1	3.00			
2		4.00		
3	5.00			4.40
4		4.00		
5	2.40			3.00
6	5.00			1.00
7		3.00		
8		4.00		
9				3.00

The road is 9 feet wide. Calculate the cubic yards of roof and floor brushing to be made to give average grade to the finished road and give this grade in percentage. The height of the road is to be preserved.

2. A slope is driven in a direction of N  $30^{\circ}$  E on the full pitch of a coal seam which is 36 degrees. At a point along the main entry, which has been driven along the strike of the

seam, it is desired to drive an angle raise to the surface having an inclination of 14 degrees. Find by calculation at what bearing this must be driven:	
(a) in an outbye direction;	25
(b) in an inbye direction.....	
3. Describe fully how you would survey a strip pit and locate it. Estimates are required as to the approximate amount of cover to be removed and finally the area, tonnage content and cover actually removed. Give an example in which both surface and coal seam are undulating. Assume all dimensions.....	30
4. Describe generally the structural geological features between the Rocky Mountains and the Plains of Alberta and the way in which the various coal deposits are affected in respect to mining conditions and quality.....	30
5. A coal seam pitching 10 degrees has been discovered on the banks of a creek in unsurveyed territory about three miles distant from a railway which crosses the strike of the measures. It is desired to stake claims and trace the coal seam with a view to development near the railway. You have been put in charge of this work; outline what you would do. There are no other coal exposures.....	35
6. Discuss fully the process of subsidence, its cause, modifying conditions, extent and time element.....	35
7. A profile of an underground levelling as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act, must be handed in to the presiding examiners with the answers to this paper.....	5

**GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH**

**EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949**

**MINE ELECTRICIANS' CERTIFICATES  
(FIRST CLASS)**

Marks obtainable 200	Marks required 120
Paper No. 1	Time—1½ hours

**THE COAL MINES REGULATION ACT**

Values

1. What are the requirements of Section 50 of The Coal Mines Regulation Act regarding when a mine electrician must be appointed, exemptions provided for, and what constitutes an offence against the Act?.....	55
2. What are the requirements of Regulation (d) of the Electrical Regulations regarding Notices to be exhibited?.....	25
3. What are the requirements of sub-section (k) of the Electrical Regulations under the above Act, with reference to switchgear installations?.....	50
4. What are the requirements of Sub-section (n) of the Electrical Regulations under the above Act, with reference to Flexible cables?.....	30
5. What are the requirements of sub-section (q) of the Electrical Regulations regarding shot-firing?.....	20
6. What are the requirements of Regulation (e), paragraph 1 and 2 of the Electrical Regulations with reference to the providing of means of telephonic or other equivalent means of communications, and the provisions required to be made for the extinguishing of fires, respectively?.....	20

**GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH**

**EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949**

**MINE ELECTRICIANS' CERTIFICATES  
(FIRST CLASS)**

Marks obtainable 200	Marks required 120
Paper No. 2	Time—2 hours

**THEORY**

Values

1. A gear with 35 teeth runs at a speed of 144 revolutions per minute and meshes with a gear having 56 teeth. What is the speed of the latter?.....	30
---	----

2. Calculate the circular mils cross section of a cable to carry 1,000 amps a distance of 10,000 feet with a 50 volt drop (500,000 cm has a resistance of 0.0216 ohms per 1,000 feet).....	35
3. Assume that you have a sufficient number of identical 100 ohm resistor tubes rated at one ampere each. How many would be necessary and how should they be connected to furnish a resistance of 200 ohms and carry a current of 2 amperes in the circuit?.....	35
4. A concentrated load of ten 100 watt, 120 volt lamps are located 1,000 feet from the source of supply. If No. 10 wire is used (1 ohm per 1,000 ft.) and it is desired that 120 volts be maintained at the load, what must be the voltage at the source? Show how you arrive at answer.....	35
5. What is the speed in revolutions per minute of a synchronous motor having 8 poles, when it is connected to a 60 cycle source?.....	30
6. A coil contains a resistance of 10 ohms and in series with it an inductance of 0.1 henry. If the frequency of the source be 60 cycles, find the voltage necessary to cause a current of 2 amperes to flow through the circuit.....	35

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## GOVERNMENT OF THE PROVINCE OF ALBERTA

## MINES BRANCH

## EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

May 31, 1949

MINE ELECTRICIANS' CERTIFICATES  
(FIRST CLASS)Marks obtainable, 200  
Paper No. 3Marks required 120  
Time—3½ hours

## PRACTICAL WORK

Values

1. Draw a diagram showing the connections and instruments necessary to measure the voltage, current and power supplied to an A.C., three phase, 10 H.P., 220 volt motor..... 20
2. Does the rating of an oil circuit breaker need to be the same ampere rating as that of a fused switch, where it is used for feeder protection of a motor circuit?..... 15
3. (a) Is it possible to use Delta connected motors on a Y system?  
(b) Would it be practical to operate a wound rotor induction motor under load with only a portion of its starting resistance cut out?

Give reasons for your answer..... 10

4. A shunt generator refuses to build up its voltage to its normal value. Enumerate the possible causes for the failure. Discuss how you would test for each of these possibilities. 25
5. (a) Explain how a synchronous motor operates..... 10  
(b) What is meant by a universal motor?..... 10
6. If a three phase squirrel cage induction motor was over-heating, describe fully what troubles you would look for and what tests you would make to determine the cause..... 20
7. Describe fully what equipment you would use and how you would install a lead sheathed steel wire armored cable, conductor size No. 00, in a borehole. The borehole is 500 feet in depth..... 20
8. A three phase motor with an across-the-line starter is to be controlled from three (3) remote control stations with Start-Stop buttons. Make a sketch of the connections for the remote control stations..... 20
9. Make a sketch or diagram showing the internal connections of a starting compensator, showing auto-transformers, etc..... 20
10. (a) Explain what is meant by "Earth Leakage Control" and describe how such control functions..... 10  
(b) Make sketch of earth leakage control apparatus with which you are familiar..... 10

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

MINE ELECTRICIANS' CERTIFICATES  
(SECOND CLASS)

Marks obtainable 200  
Paper No. 1

Marks required 100  
Time— $3\frac{1}{2}$  hours

THE COAL MINES REGULATION ACT

	Values
1. What are the requirements of Section 41 of the Coal Mines Regulation Act regarding the qualifications required before a Mine Electrician's Certificate can be granted?.....	10
2. What are the requirements of Section 50 of the Coal Mines Regulation Act regarding when an electrician must be appointed, exemptions provided for, offences, etc. ....	40
3. What notices shall be exhibited where necessary?.....	22
4. Explain the following electrical terms: (a) Use of Electricity; (b) Danger; (c) Switchgear; (d) Medium Pressure; (e) Authorized Person.....	18
5. Under what condition is the use of electricity prohibited in any part of a mine. In cases of a difference of opinion in this matter, how may same be settled? (Electrical Regulation (a) ).....	12
6. What are the requirements of Regulation (j) of the Electrical Regulations with regard to the transformation of electricity?.....	18
7. What are the requirements of the Electrical Regulations with regard to annual returns and plans?.....	18
8. What are the requirements of Electrical Regulation (f) under the above Act, in connection with danger or mechanical damage to apparatus?.....	22
9. State the requirements of Electrical Regulation (k) under the above Act, with reference to switchgear, etc. ....	22
10. What are the requirements of Electrical Regulation (o), paragraph 8 of The Coal Mines Regulation Act, regarding examination of flexible cables, etc.?.....	18

GOVERNMENT OF THE PROVINCE OF ALBERTA  
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT  
May 31, 1949

MINE ELECTRICIANS' CERTIFICATES  
(SECOND CLASS)

Marks obtainable 200  
Paper No. 2

Marks required 10<sup>0</sup>  
Time— $3\frac{1}{2}$  hour

THEORY AND PRACTICAL WORK

	Values
1. Is it wise to put telephone wires in a conduit with alternating current power lines? Give reasons for your answer.....	15
2. Describe a Starting Compensator, explaining how it functions in bringing a motor up to speed.....	20
3. What is the resistance of a copper wire 1,000 feet in length when its cross section is 50,000 circular mils?.....	20
4. (a) How does the power in a circuit vary with the current?..... (b) How does the resistance of a wire vary with its cross-section?.....	10
5. (a) How would you recognize the Series from the Shunt motor?..... (b) Draw a simple diagram showing the circuit of a Series wound motor, also a Shunt wound motor and a Compound wound motor.....	10
	15

6. A 100 ampere, 13 kv oil circuit breaker has a trip coil rated up to 5 amperes. The trip coil is energized by a current transformer rated 100/5 amperes. What current setting should the trip coil have if it is desired that the circuit breaker trip at 80 amperes?.....	20
7. Describe the construction of an oil circuit breaker. What is such a device used for and what attention does it require?.....	20
8. What are the requirements with respect to motor over-current protection for continuous duty motors?.....	15
9. (a) Explain how you would test to find out if there was a ground on one leg of a three phase, three wire, ungrounded system.....	10
(b) Explain how you would test the insulation value of a system.....	10
10. With reference to the starting and control equipment furnished with a 3 phase, wound rotor, A.C. motor, give complete information as to how would complete the diagram below. .....	25

## PARTICULARS OF OPERATING MINES IN VARIOUS AREAS

**ARDLEY AREA****R. R. Straub—Mine No. 255**

Mine Office: Alix, Alberta.  
 Mine Manager: R. R. Straub.  
 Mine Surveyor: David Jones.  
 Foreman: R. R. Straub.  
 Thickness of Seam: 6 ft. 2 in.  
 Thickness of Cover: 24 ft. to 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 5, Sec. 17, Twp. 38,  
     Rge. 23, W. 4th Mer.  
 Coal Mining Lease: C.P.R.  
 Truck Mine.  
 Registered Trade Name: Conger Coal.

**J. W. Sissons—Mine No. 809**

Mine Office: Alix, Alberta.  
 Mine Manager: R. C. Sissons.  
 Mine Surveyor: R. Hamilton.  
 Foreman: R. C. Sissons.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: Approximately 45 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 3, 4, 5, 6, 15 and 16,  
     Sec. 33, Twp. 38, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Numbers: C.P.R. 475, 584.  
 Truck Mine.  
 Registered Trade Name: Pearl of Furnace Coal.

**Karl Schnepf—Mine No. 969**

Mine Office: Delburne, Alberta.  
 Mine Manager: Karl Schnepf.  
 Mine Surveyor: L. C. Stevens.  
 Overman: Karl Schnepf.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x  
     6 ft. Depth of Slope: 80 ft.  
 Location of Mine: L.S. 14, Sec. 10, Twp. 38,  
     Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 585.  
 Truck Mine.  
 Registered Trade Name: Great Bend Coal.

**A. Johnson—Mine No. 1018**

Mine Office: Ardley, Alberta.  
 Mine Manager: A. Johnson.  
 Mine Surveyor: David Jones.  
 Foreman: A. Johnson.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 30 ft. to 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 3, Sec. 17, Twp. 38,  
     Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 274.  
 Truck Mine.  
 Registered Trade Name: Dixie Coal.

**Carl Kurp—Mine No. 1135**

Mine Office: Delburne, Alberta.  
 Mine Manager: Carl Kurp.  
 Mine Surveyor: David Jones.  
 Overman: Carl Kurp.

Thickness of Seam: 5½ ft.

Thickness of Cover: 153 ft.

Inclination of Seam: Horizontal.

Form of Opening: Entry. Size of Entry:  
     6 ft. x 8 ft.

Location of Mine: L.S. 4 and 5, Sec. 7, Twp.  
     38, Rge. 23, W. 4th Mer.

Coal Mining Lease Number: C.P.R. 11, 11-A.  
 Truck Mine.

Registered Trade Name: Kurp's Coal.

**Allyn Mann Construction Co.—Mine No. 1488**

Mine Office: Alix, Alberta.  
 General Manager: H. Allyn Mann.  
 Mine Manager: Niels Mortenson.  
 Mine Surveyor: David Jones.  
 Foreman: Niels Mortenson.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 20 ft. to 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: E. ½ of L.S. 3 and 4, Sec. 29,  
     Twp. 38, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 512.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Eclipse Coal.

**James McDowell—Mine No. 1613**

Mine Office: Ardley, Alberta.  
 Mine Manager: William R. Auvigne.  
 Mine Surveyor: David Jones.  
 Foreman: William R. Auvigne.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 10, Sec. 20, Twp. 38,  
     Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: 5484.  
 Truck Mine.  
 Registered Trade Name: McDowell Coal.

**Wm. G. Martin—Mine No. 1663**

Mine Office: Delburne, Alberta.  
 Mine Manager: Wm. G. Martin.  
 Mine Surveyor: David Jones.  
 Foreman: Wm. G. Martin.  
 Thickness of Seam: 6 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: E. and W. ½ of L.S. 15 and  
     16, Sec. 22, Twp. 37, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: 5634.  
 Truck Mine.  
 Registered Trade Name: Martin Coal.

**D. L. Gordon—Mine No. 1673**

Mine Office: Warden, Alberta.

Mine Manager: D. L. Gordon.

Mine Surveyor: David Jones.

Foreman: D. L. Gordon.

Thickness of Seam: 4 ft.

Thickness of Cover: 30 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: L.S. 1 and 2, Sec. 15, Twp. 38, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 658.  
 Truck Mine.  
 Registered Trade Name: Gordon Coal.

#### **John Lynass—Mine No. 1675**

Mine Office: Delburne, Alberta.  
 Mine Manager: Walter D. Deuchar.  
 Mine Surveyor: David Jones.  
 Foreman: Walter D. Deuchar.  
 Thickness of Seam: 5½ ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 13, Sec. 8, Twp. 38, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C. 127.  
 Truck Mine.  
 Registered Trade Name: Glennifer Coal.

#### **BIG VALLEY AREA**

**Big Valley Collieries (Alberta) Ltd.—Mine No. 864**  
 Mine Office: Big Valley, Alberta.  
 Mine Manager: John Schymizek.  
 Mine Surveyor: David Jones.  
 Thickness of Seam: 9 ft.  
 Thickness of Cover: 10 ft. to 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 16, Sec. 26, Twp. 35, Rge. 20, W. 4th Mer.  
 Coal Mining Lease: 5834.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Big Valley Coal.

**Robert Campkin & Sons—Mine No. 1661**  
 Mine Office: Lousana, Alberta.  
 General Manager: R. Campkin.  
 Mine Manager: B. Campkin.  
 Mine Surveyor: David Jones.  
 Foreman: B. Campbell.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 30 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 7 and 13, Sec. 13, Twp. 36, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 691.  
 Truck Mine.  
 Registered Trade Name: Campkin Mine Coal.

#### **George L. Grant—Mine No. 1708**

Mine Office: Fenn, Alberta.  
 Mine Manager: Richard C. Grant.  
 Foreman: Richard C. Grant.  
 Thickness of Seam: 3 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1, Sec. 9, Twp. 35, Rge. 20, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 700.  
 Truck Mine.  
 Registered Trade Name: Grant Coal.

#### **BROOKS AREA**

**Kleenbirn Collieries Ltd.—Mine No. 1404**  
 Authorized Capital: \$250,000.00.  
 Name of President: J. Gordon Westgate.

Name of Directors: J. Gordon Westgate, Reg. M. Balfour.  
 Name of Secretary-Treasurer: Reg. M. Balfour.  
 Mine Office: Eyremore, Alberta.  
 Mine Manager: George A. Wiggin.  
 Mine Surveyor: J. F. Hamilton.  
 Foreman: W. M. Cragg.  
 Blasters: W. E. Herrick, Edgar Nelson.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 45 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sees. 22, 23, 26, 27, 34, 35 and 36, Twp. 17, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 683.  
 Mine located on C.P.R.  
 Registered Trade Name: Birnwel Coal.

#### **CAMROSE AREA**

##### **Joe Proskow—Mine No. 241**

Mine Office: Dinant, Alberta.  
 Mine Manager: Joe Proskow.  
 Mine Surveyor: David Jones.  
 Foreman: Joe Proskow.  
 Thickness of Seam: 6½ ft.  
 Thickness of Cover: 18 ft. to 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 4, Sec. 18, Twp. 48, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 995.  
 Truck Mine.  
 Registered Trade Name: Proskow Coal.

##### **S. H. Burnstad—Mine No. 724**

Mine Office: Ohaton, Alberta.  
 Mine Manager: S. H. Burnstad.  
 Mine Surveyor: David Jones.  
 Foreman: S. H. Burnstad.  
 Thickness of Seam: 5 ft. 9 in.  
 Thickness of Cover: 21 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. and S. ½ of L.S. 3 and 6, Sec. 14, Twp. 48, Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: 5525.  
 Truck Mine.  
 Registered Trade Name: Burnstad's Coal.

##### **Red Flame Coal Co. Ltd.—Mine No. 1420**

Authorized Capital: \$13,500.00.  
 Name of President: Alex Russell.  
 Name of Directors: Alex Russell, Robert Shortreed.  
 Name of Secretary: Robert Shortreed.  
 Mine Office: Round Hill, Alberta.  
 Mine Manager: Howell Evans.  
 Mine Surveyor: David Jones.  
 Overman: W. V. Gotheridge.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 110 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x 6 ft. Depth of Slope: 200 ft.  
 Location of Mine: N.W. ¼ of Sec. 19, Twp. 48, Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 467 B, 5460.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Red Flame Coal.

**George Shute & Partners—Mine No. 1524**

Mine Office: Dinant, Alberta.  
 Mine Manager: G. Shute.  
 Mine Surveyor: David Jones.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 18 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 8 and 9, Sec. 7, Twp. 48, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 546.  
 Truck Mine.  
 Registered Trade Name: Demay Coal.

**Alberta Coal Co. Ltd.—Mine No. 1603**

Authorized Capital: \$200,000.00.  
 Name of President: D. Twomey.  
 Name of Directors: D. Twomey, A. E. Burgess.  
 Name of Secretary: A. E. Burgess.  
 Name of Treasurer: D. Twomey.  
 Head Office: 332 7th Avenue West, Calgary, Alberta.  
 Mine Office: Camrose, Alberta.  
 General Manager: D. Twomey.  
 Mine Manager: Bruce Munn.  
 Mine Surveyor: David Jones.  
 Foreman: J. Dainith.  
 Thickness of Seam: 4 ft. to 5½ ft.  
 Thickness of Cover: 18 ft. to 30 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 2, 6, 7, 10, 11 and 15, Sec. 29, Twp. 46, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Numbers: S.L. 529, C.P.R. 602.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Camrose Coal.

**CARBON AREA****A. Fox (Kneehill Mine)—Mine No. 53**

Authorized Capital: \$12,000.00.  
 Mine Office: Carbon, Alberta.  
 General Manager: Alfred Fox.  
 Mine Surveyor: David Jones.  
 Overman: Alfred Fox.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 185 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: S.W. ¼ of L.S. 3, Sec. 14, Twp. 29, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 516.  
 Truck Mine.  
 Registered Trade Name: Carbon Sunrise Coal.

**Kneehill Coal Co.—Mine No. 194**

Authorized Capital: \$500,000.00  
 Name of President: P. D. McArthur.  
 Name of Directors: P. D. McArthur, N. J. Christie, Frank Tempest, R. Stewart.  
 Name of Secretary: Frank Tempest.  
 Head Office: 217 Dominion Bank Building, Calgary, Alberta.  
 Mine Office: Carbon, Alberta.  
 Mine Manager: A. A. McArthur.  
 Mine Surveyor: A. G. Macaulay.  
 Foreman: Arthur F. Rayner.  
 Thickness of Seam: 4½ ft.

Thickness of Cover: 19 ft. to 27 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N.E. ¼ of Sec. 4, Twp. 31, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 224.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Kneehill Coal.

**Inland Coal Co.—Mine No. 384**

Authorized Capital: \$20,000.00.  
 Name of President: W. J. Nesbitt.  
 Name of Directors: W. J. Nesbitt, R. B. Watson.  
 Name of Secretary: R. B. Watson.  
 Head Office: 804 McLeod Building, Edmonton, Alberta.  
 Mine Office: Three Hills, Alberta.  
 General Manager: W. J. Nesbitt.  
 Mine Manager: B. Nugent.  
 Mine Surveyor: David Jones.  
 Fireboss: Pete George.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 160 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 8 ft. x 12 ft. Depth of Shaft: 168 ft.  
 Location of Mine: S. ½ of Sec. 36, Twp. 31, Rge. 24, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 635.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Kneehill Valley Coal.

**East Trochu Coal Co.—Mine No. 710**

Name of Secretary: J. A. Patterson.  
 Name of Treasurer: L. G. Yard.  
 Mine Office: Trochu, Alberta.  
 Mine Manager: Lloyd G. Yard.  
 Mine Surveyor: David Jones.  
 Overman: L. G. Yard.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 80 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 9, 10, 15 and 16, Sec. 14, Twp. 33, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: 5320.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Troalta Coal.

**Ben Pickering—Mine No. 817**

Mine Office: Ghost Pine Creek, Alberta.  
 Mine Manager: Ben Pickering.  
 Mine Surveyor: David Jones.  
 Overman: Ben Pickering.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x 6 ft. Depth of Slope: 100 ft.  
 Location of Mine: S. ½ of L.S. 1 and 2, Sec. 6, Twp. 31, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: 5510.  
 Truck Mine.  
 Registered Trade Name: Orkney Coal.

**E. Reissig—Mine No. 921**

Mine Office: Trochu, Alberta.  
 Mine Manager: E. Reissig.

## THE MINES DIVISION

Mine Surveyor: David Jones.  
 Overman: E. Reissig.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 85 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x 7 ft.  
 Location of Mine: L.S. 15 and 16, Sec. 14, Twp. 33, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: 5464.  
 Truck Mine.  
 Registered Trade Name: Meadow Bank Coal.

**East Carbon Coal Co.—Mine No. 1060**

Mine Office: Carbon, Alberta.  
 Mine Manager: Ben Fox.  
 Mine Surveyor: David Jones.  
 Overman: Ben Fox.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 200 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 6 ft. x 7 ft. Depth of Shaft: 100 ft.  
 Location of Mine: L.S. 12 and 13, Sec. 7, Twp. 29, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.L.S. 255.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Reliable Coal.

**C. C. Campbell—Mine No. 1226**

Mine Office: Trochu, Alberta.  
 Mine Manager: C. C. Campbell.  
 Mine Surveyor: L. C. Stevens.  
 Overman: C. C. Campbell.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x 8 ft. Depth of Slope: 600 ft.  
 Location of Mine: W. ½ of L.S. 9, Sec. 29, Twp. 33, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 547.  
 Truck Mine.  
 Registered Trade Name: Campbell Coal.

**H. J. Halbert & Fred Beierle—Mine No. 1283**

Mine Office: Trochu, Alberta.  
 Mine Manager: H. J. Halbert.  
 Mine Surveyor: David Jones.  
 Overman: H. J. Halbert.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 30 ft. to 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope.  
 Location of Mine: S.E. ¼ of L.S. 8, Sec. 14, Twp. 33, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: 5173.  
 Truck Mine.  
 Registered Trade Name: H. B. Coal.

**Balogh Brothers—Mine No. 1359**

Authorized Capital: \$10,000.00.  
 Mine Office: Carbon, Alberta.  
 Mine Manager: Aron Balogh.  
 Mine Surveyor: David Jones.  
 Overman: Aron Balogh.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 160 ft.

Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft. x 6 ft. Depth of Slope: 125 ft.  
 Location of Mine: L.S. 16, Sec. 12, Twp. 29, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 234.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Arctic Coal.

**Nuttall & Davidson—Mine No. 1499**

Mine Office: Three Hills, Alberta.  
 Mine Manager: F. Nuttal.  
 Mine Surveyor: David Jones.  
 Foreman: F. Nuttal.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 25 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1 and 2, Sec. 9, Twp. 31, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: 5257.  
 Truck Mine.  
 Registered Trade Name: Fire King Coal.

**D. W. Davidson—Mine No. 1676**

Mine Office: Three Hills, Alberta.  
 General Manager: D. W. Davidson.  
 Mine Surveyor: David Jones.  
 Foreman: D. W. Davidson.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Pts. of L.S. 11 and 14, Sec. 22, Twp. 31, Rge. 24, W. 4th Mer.  
 Coal Mining Lease Number: 5635.  
 Registered Trade Name: Black Star Coal.

**CASCADE AREA****The Canmore Mines Ltd.—Mine No. 2**

Authorized Capital: \$1,000,000.00.  
 Name of President: Edmund Hayes.  
 Names of Directors: Edmund Hayes, B. F. Crane, W. R. Stewart, A. J. Macmillan, R. M. Young, George F. Jewett, Louis S. Headley, R. Morris.  
 Name of Secretary: J. E. A. Macleod.  
 Name of Treasurer: Louis S. Headley.  
 Mine Office: Canmore, Alberta.  
 General Manager: William Wilson.  
 Mine Manager: V. Mrokvia.  
 Mine Surveyor: C. S. Dewis.  
 Overmen: J. Brown, A. Fox, S. Lauhela.  
 Firebosses: W. Bell, A. Baroni, M. Carmichael, A. B. Crawford, J. Crawford, C. Foster, J. James, A. Kowal, A. Knudson, H. Musgrave, J. Riva, J. Miskow, H. Paavalta, B. Rogers, H. Niskanen, A. Shellian.

Thickness of Seam: 8 ft. x 10 ft.  
 Thickness of Cover: 0 to 2,000 ft.  
 Inclination of Seam: 10 to 35 degrees.  
 Form of Opening: Slope. Size of Slope: 16 ft. x 8 ft. Depth of Slope: No. 4 Seam—2,400 ft. No. 5 Seam—1,100 ft.  
 Location of Mine: N.E. Pt. of L.S. 1, Sec. 29, Twp. 24, Rge. 10, W 5th Mer.  
 Coal Mining Lease Number: S.L. 130, 131.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Canmore Coal.

**Frank Wheatley & Sons—Mine No. 1244**

Authorized Capital: \$25,000.00.

Mine Office: Banff, Alberta.

Mine Manager: F. M. Wheatley.

Mine Surveyor: L. C. Stevens.

Fireboss: J. W. Wheatley.

Thickness of Seam: 8 ft.

Thickness of Cover: 27 ft.

Inclination of Seam: 40 degrees.

Form of Opening: Slope. Size of Slope: 8 ft. x 10 ft. Depth of Slope: 300 ft.

Location of Mine: L.S. 12, Sec. 4, Twp. 26, Rge. 11, W. 5th Mer.

Coal Mining Lease Number: C.L.S. 9.

Truck Mine.

Registered Trade Name: Wheatley Brothers Coal.

**Kananaskis Exploration & Development Co.—Mine No. 1667**

Head Office: 227A 7th Avenue West, Calgary, Alberta.

Mine Office: Seebe, Alberta.

Mine Manager: Leslie McDonald.

Mine Surveyor: T. H. Hodson.

Overman: Wm. Barclay.

Firebosses: D. Williamson, M. McGuckie, R. Clack.

Thickness of Seam: 18 ft.

Form of Opening: Slope.

Location of Mine: Sec. 3, Twp. 23, Rge. 9, W. 5th Mer.

Coal Mining Lease Number: 5652.

C.P.R. and Truck Mine.

Registered Trade Name: Cascade Coal.

**CASTOR AREA****John Tyrlik—Mine No. 251**

Mine Office: Heisler, Alberta.

Mine Manager: John Tyrlik.

Mine Surveyor: David Jones.

Overman: John Tyrlik.

Thickness of Seam: 4 ft. 10 in.

Thickness of Cover: 80 ft.

Inclination of Seam: Horizontal.

Form of Opening: Slope. Size of Slope: 6 ft. x 6 ft. Depth of Slope: 40 ft.

Location of Mine: L.S. 9, Sec. 28, Twp. 42, Rge. 17, W. 4th Mer.

Coal Mining Lease Number: 5530.

Truck Mine.

Registered Trade Name: Diamond G Coal.

**James Chiswick—Mine No. 291**

Mine Office: Gadsby, Alberta.

Mine Manager: James Chiswick.

Mine Surveyor: David Jones.

Foreman: James Chiswick.

Thickness of Seam: 4½ ft.

Thickness of Cover: 25 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: N. and S. ½ of L.S. 11 and 6, Sec. 28, Twp. 39, Rge. 16, W. 4th Mer.

Coal Mining Lease Number: 5093.

Truck Mine.

Registered Trade Name: Sunset Coal.

**J. R. James & E. J. Boyce—Mine No. 447**

Authorized Capital: \$4,000.00.

Mine Office: Forestburg, Alberta.

Mine Surveyor: David Jones.

Overman: A. J. James.

Mine Manager: J. R. James.

Thickness of Seam: 7 ft.

Thickness of Cover: 22 ft.

Inclination of Seam: Horizontal.

Form of Opening: Shaft. Size of Shaft: 5 ft. x 6 ft. Depth of Shaft: 29 ft.

Location of Mine: L.S. 13, Sec. 28, Twp. 40, Rge. 15, W. 4th Mer.

Coal Mining Lease Number: 5416.

C.N.R. and Truck Mine.

Registered Trade Name: Ever Ready Coal.

**Komperdo & Partners—Mine No. 615**

Mine Office: Heisler, Alberta.

General Manager: John Komperdo.

Mine Manager: James Bowie.

Mine Surveyor: David Jones.

Overman: James Bowie.

Thickness of Seam: 5 ft. 7 in.

Thickness of Cover: 95 ft.

Inclination of Seam: Horizontal.

Form of Opening: Slope. Size of Slope: 7 ft. x 7 ft. Depth of Slope: 70 ft.

Location of Mine: L.S. 13, Sec. 22, Twp. 42, Rge. 17, W. 4th Mer.

Coal Mining Lease Number: 5429.

C.N.R. Mine.

Registered Trade Name: Riverside Coal.

**Howlett & Osmack—Mine No. 666**

Mine Office: Forestburg, Alberta.

Mine Manager: Geo. Klashinsky.

Mine Surveyor: David Jones.

Foreman: Geo. Klashinsky.

Thickness of Seam: 6 ft.

Thickness of Cover: 20 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: L.S. 16, Sec. 2, Twp. 41, Rge. 16, W. 4th Mer.

Coal Mining Lease Number: 5448.

C. N. R. and Truck Mine.

Registered Trade Name: K. M. Coal.

**O. V. Remillard—Mine No. 902**

Mine Office: Castor, Alberta.

Mine Manager: O. V. Remillard.

Mine Surveyor: David Jones.

Overman: O. V. Remillard.

Thickness of Seam: 5 ft.

Thickness of Cover: 62 ft.

Inclination of Seam: Horizontal.

Form of Opening: Slope. Size of Slope: 6 ft. x 7 ft. Depth of Slope: 127 ft.

Location of Mine: L.S. 15 and 16, Sec. 33, Twp. 37, Rge. 14, W. 4th Mer.

Coal Mining Lease Number: C.P.R. 186.

Truck Mine.

Registered Trade Name: Remillard Coal.

**D. H. Wiltse, A. J. Cordel & T. Pilsworth—Mine No. 953**

Mine Office: Forestburg, Alberta.

Mine Manager: Don Wiltse.

Mine Surveyor: David Jones.  
 Foreman: Don Wiltse.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Seam: S.E.  $\frac{1}{4}$  of L.S. 1, Sec. 32,  
     Twp. 40, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: 5479.  
 Truck Mine.  
 Registered Trade Name: Battle River Coal.

**Alberta Coal Co. Ltd.—Mine No. 1046**

Mine Office: Halkirk, Alberta.  
 Mine Manager: R. Mingle.  
 Mine Surveyor: David Jones.  
 Foreman: W. M. Jamieson.  
 Thickness of Seam: 9 ft.  
 Thickness of Cover: 35 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 6, 7 and 8, Sec. 20,  
     Twp. 40, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: 5433.  
 Truck Mine.  
 Registered Trade Name: Cordel Coal.

**Chas. Strader—Mine No. 1062**

Mine Office: Halkirk, Alberta.  
 Mine Manager: James Strader.  
 Mine Surveyor: David Jones.  
 Overman: James Strader.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 4, Sec. 17, Twp. 39,  
     Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 41.  
 Truck Mine.  
 Registered Trade Name: Esperanze Coal.

**J. H. Ainsworth—Mine No. 1232**

Mine Office: Halkirk, Alberta.  
 Mine Manager: J. H. Ainsworth.  
 Mine Surveyor: David Jones.  
 Overman: J. H. Ainsworth.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 13, Sec. 25, Twp. 40,  
     Rge. 16, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 478.  
 Truck Mine.  
 Registered Trade Name: Ainsworth Coal.

**R. Davis & Doan—Mine No. 1237**

Mine Office: Halkirk, Alberta.  
 Mine Manager: Roland Davis.  
 Mine Surveyor: David Jones.  
 Overman: Roland Davis.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 83 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 11, Sec. 8, Twp. 39,  
     Rge. 15, W. 4th Mer.  
 Coal Mining Lease: H.B.C.

Truck Mine.  
 Registered Trade Name: Ruby Glow Coal.

**B. J. Gerla & W. Runge—Mine No. 1248**

Mine Office: Donalda, Alberta.  
 Mine Manager: B. J. Gerla.  
 Mine Surveyor: David Jones.  
 Overman: B. J. Gerla.  
 Thickness of Seam: 4 ft. 6 in.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x  
     5 ft. Depth of Slope: 30 ft.  
 Location of Mine: L.S. 5, Sec. 29, Twp. 41,  
     Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 517.  
 Truck Mine.

**James Easton—Mine No. 1417**

Mine Office: Castor, Alberta.  
 Mine Manager: James Easton.  
 Mine Surveyor: David Jones.  
 Foreman: James Easton.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 40 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: S.W.  $\frac{1}{4}$  of L.S. 14, Sec. 34,  
     Twp. 37, Rge. 14, W. 4th Mer.  
 Coal Mining Lease Number: 5013.  
 Truck Mine.  
 Registered Trade Name: Burn-Rite Coal.

**William J. Jones, Sr.—Mine No. 1435**

Mine Office: Edberg, Alberta.  
 Mine Manager: William J. Jones, Sr.  
 Mine Surveyor: David Jones.  
 Overman: William J. Jones, Sr.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 75 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: N. and S.  $\frac{1}{2}$  of L.S. 6 and  
     11, Sec. 2, Twp. 44, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: 5122.  
 Truck Mine.  
 Registered Trade Name: Rosebush Coal.

**Leonard Buckle—Mine No. 1441**

Mine Office: Donalda, Alberta.  
 Mine Manager: L. Buckle.  
 Mine Surveyor: David Jones.  
 Overman: L. Buckle.  
 Thickness of Seam: 10 ft. 10 in.  
 Thickness of Cover: 130 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 5, 12 and 13, Sec. 16,  
     Twp. 42, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: 5132.  
 Truck Mine.  
 Registered Trade Name: Black Emerald Coal.

**A. Annonson & J. Radford—Mine No. 1572**

Authorized Capital: \$3,000.00.  
 Name of President: A. E. Annonson.  
 Name of Director: H. O. Annonson.  
 Name of Secretary: John H. Radford.  
 Name of Treasurer: A. E. Annonson.

Mine Office: Donalda, Alberta.  
 Mine Manager: John H. Radford.  
 Mine Surveyor: David Jones.  
 Overman: John H. Radford.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift. Size of Drift: 6 ft. x 7 ft.  
 Location of Mine: N. and S. ½ of L.S. 4 and 5, Sec. 28, Twp. 41, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: 5325.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Black Eagle Coal.

**Forestburg Collieries Ltd.—Mine No. 1578**

Authorized Capital: \$20,000.  
 Name of President: Walter O. Scott.  
 Names of Directors: W. O. Scott, R. M. Jenkinson, H. F. Bish, M. Reid, K.C. Name of Sec.-Treas.: R. M. Jenkinson.  
 Head Office: 410 Tegler Building, Edmonton.  
 Mine Office: Forestburg, Alberta.  
 Mine Manager: Homer F. Bish.  
 Mine Surveyor: David Jones.  
 Foreman: Walter H. Bish.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 40 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 15 and 16, Sec. 36, Twp. 40, Rge. 16, W. 4th Mer.  
 Coal Mining Lease Numbers: 5674, 5750, 5777, 5815, 5832, 5833.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Diplomat Coal.

**J. J. Mills—Mine No. 1587**

Authorized Capital: \$10,000.00.  
 Mine Office: Heisler, Alberta.  
 Mine Manager: J. J. Mills.  
 Mine Surveyor: David Jones.  
 Overman: J. J. Mills.  
 Thickness of Seam: 7 ft.  
 Thickness of Cover: 109 ft.  
 Form of Opening: Slope. Size of Slope: 6 ft. x 7 ft. Depth of Slope: 153 ft.  
 Location of Mine: S.W. and S.E. ¼ L.S. 11 and 12, Sec. 22, Twp. 42, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: 5425.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Eagle Coal.

**Castor Coal and Construction Co.—Mine No. 1608**

Mine Office: Castor, Alberta.  
 Mine Manager: D. C. Henderson.  
 Mine Surveyor: David Jones.  
 Foreman: D. C. Henderson.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 16 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: S. and N. ½ of L.S. 6 and 3, Sec. 3, Twp. 38, Rgs. 14, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 561, 604.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Tower Coal.

**Stettler Coal Co.—Mine No. 1614**

Mine Office: Stettler, Alberta.  
 General Manager: George McKay Milne.  
 Mine Manager: Alfred Sorken.  
 Mine Surveyor: David Jones.  
 Foreman: Alfred Sorken.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 60 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 16, Sec. 26, Twp. 40, Rge. 16, W. 4th Mer.  
 Coal Mining Lease Number: 2900.  
 Truck Mine.  
 Registered Trade Name: All-Fire Coal.

**F. N. Wiltse—Mine No. 1634**

Mine Office: Halkirk, Alberta.  
 Mine Manager: F. N. Wiltse.  
 Mine Surveyor: David Jones.  
 Foreman: F. N. Wiltse.  
 Thickness of Seam: 5 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: W. ½ L.S. 11, Sec. 32, Twp. 39, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: 5564.  
 Truck Mine.  
 Registered Trade Name: Canyon Mine Coal.

**J. Bradley & A. O'Brien—Mine No. 1642**

Mine Office: Halkirk, Alberta.  
 Mine Manager: A. O'Brien.  
 Mine Surveyor: David Jones.  
 Overman: A. O'Brien.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 35 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 11, 12 and 14, Sec. 25, Twp. 40, Rge. 16, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 627.  
 Truck Mine.  
 Registered Trade Name: Active Coal.

**John Lynass—Mine No. 1650**

Mine Office: Forestburg, Alberta.  
 Mine Manager: C. Lassiter.  
 Mine Surveyor: David Jones.  
 Foreman: C. Lassiter.  
 Thickness of Seam: 9 ft.  
 Thickness of Cover: 26 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 9, Sec. 32, Twp. 40, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: 5559.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Golden Glow Coal.

**Michael & Martin Wisla—Mine No. 1674**

Mine Office: Rosalind, Alberta.  
 Mine Manager: Michael Wisla.  
 Mine Surveyor: David Jones.  
 Overman: Michael Wisla.  
 Thickness of Seam: 3 ft. 10 in.  
 Thickness of Cover: 198 ft.  
 Inclination of Seam: Horizontal.

Form of Opening: Slope. Size of Slope: 6 ft. x 8 ft. Depth of Slope: 206 ft.  
 Location of Mines: L.S. 1, 8 and 9, Sec. 7, Twp. 43, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 657.  
 Truck Mine.  
 Registered Trade Name: Rosalind Coal.

**John C. Reed & Son—Mine No. 1677**

Mine Office: Forestburg, Alberta.  
 Mine Manager: John Reed.  
 Overman: John Reed.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 34 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Size of Shaft: 5 ft. x 5 ft.  
 Depth of Shaft: 43 ft.  
 Location of Mine: L.S. 1, Sec. 2, Twp. 41, Rge. 16, W. 4th Mer.  
 Coal Mining Lease Number: 5658.  
 Truck Mine.  
 Registered Trade Name: B.B. Coal.

**N. MacPherson & D. Kroetch—Mine No. 1689**

Mine Office: Heisler, Alberta.  
 Mine Manager: N. MacPherson.  
 Mine Surveyor: David Jones.  
 Overman: N. MacPherson.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 82 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 8 ft. x 6 ft. Depth of Slope: 40 ft.  
 Location of Mine: L.S. 8, Sec. 21, Twp. 42, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 685.  
 Truck Mine.  
 Registered Trade Name: Black Jade Coal.

**A. J. Shannon & J. Lang—Mine No. 1691**

Mine Office: Halkirk, Alberta.  
 Mine Manager: John Lang.  
 Mine Surveyor: David Jones.  
 Foreman: John Lang.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 17 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 11 and 12, Sec. 19, Twp. 40, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 673.  
 Truck Mine.  
 Registered Trade Name: S and L Coal.

**William A. Jones—Mine No. 1694**

Mine Office: Forestburg, Alberta.  
 Mine Manager: William A. Jones.  
 Overman: William A. Jones.  
 Location of Mine: L.S. 16, Sec. 20, Twp. 42, Rge. 17, W. 4th Mer.  
 Registered Trade Name: Spruce Coulee Coal.

**M. Muyres and Sons—Mine No. 1697**

Mine Office: Forestburg, Alberta.  
 Mine Manager: M. Muyres.  
 Overman: M. Muyres.  
 Thickness of Seam: 9½ ft.

Thickness of Cover: 27 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 5 ft. x 6 ft. Depth of Shaft: 42 ft.  
 Location of Mine: L.S. 7 and 10, Sec. 32, Twp. 40, Rge. 15, W. 4th Mer.  
 Coal Mining Lease Number: 5751.  
 Truck Mine.  
 Registered Trade Name: Muyres Coal.

**Joseph Hronek, Sr.—Mine No. 1698**

Mine Office: Halkirk, Alberta.  
 Mine Manager: A. Neilson.  
 Foreman: A. Neilson.  
 Form of Opening: Strip Mine.  
 Registered Trade Name: Good View Coal.

**Dolanz, Dolanz and Strickland—Mine No. 1702**

Authorized Capital: \$15,000.00.  
 Mine Office: Heisler, Alberta.  
 Mine Manager: T. Strickland.  
 Mine Surveyor: David Jones.  
 Overman: I. Dolanz.  
 Thickness of Seam: 12 ft.  
 Thickness of Cover: 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6½ ft. x 8 ft. Depth of Slope: 250 ft.  
 Location of Mine: L.S. 3 and 4, Sec. 27, Twp. 42, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 692.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Palace Coal.

**Michael & Martin Wisla—Mine No. 1703**

Mine Office: Rosalind, Alberta.  
 Mine Manager: Martin Wisla.  
 Overman: Martin Wisla.  
 Form of Opening: Slope.  
 Location of Mine: L.S. 1, 8 and 9, Sec. 7, Twp. 43, Rge. 17, W. 4th Mer.  
 Registered Trade Name: Wisla Coal.

**CHAMPION AREA****G. Rhodes—Mine No. 136**

Authorized Capital: \$10,000.00.  
 Mine Office: Champion, Alberta.  
 Mine Manager: Cecil Rhodes.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Cecil Rhodes.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x 6 ft. Depth of Slope: 180 ft.  
 Location of Mine: L.S. 7, Sec. 8, Twp. 15, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C.  
 Truck Mine.  
 Registered Trade Name: Therriault Coal.

**P. Fontana & Sons—Mine No. 1509**

Mine Office: Champion, Alberta.  
 Mine Manager: Peter Fontana.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Peter Fontana.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 65 ft.

Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5½ ft. x 5½ ft. Depth of Slope: 240 ft.  
 Location of Mine: L.S. 15, Sec. 33, Twp. 15, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: 5290.  
 Truck Mine.  
 Registered Trade Name: Champion Coal.

**Mike Popovich—Mine No. 1565**

Authorized Capital: \$8,000.00.  
 Mine Office: Champion, Alberta.  
 Mine Manager: Mike Popovich.  
 Mine Surveyor: J. F. Hamilton.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 105 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x 6 ft. Depth of Slope: 225 ft.  
 Location of Mine: L.S. 9, Sec. 8, Twp. 16, Rge. 23, W. 4th Mer.  
 Truck Mine.  
 Registered Trade Name: Ellis Coal.

**COALSPUR AREA**

**Sterling Collieries Ltd.—Mine No. 769**  
 Authorized Capital: \$500,000.00.  
 Name of President: C. B. Munson.  
 Names of Directors: S. W. Field, H. R. Milner, W. F. Stevenson, F. J. Mitchell.  
 Name of Secretary-Treasurer: F. J. Mitchell.  
 Head Office: 912 McLeod Building, Edmonton, Alberta.  
 Mine Office: Sterco, Alberta.  
 General Manager: W. F. Stevenson.  
 Mine Manager: R. G. Walker.  
 Mine Surveyor: W. F. Stevenson.  
 Blaster: R. G. Walker.  
 Thickness of Seam: 20 ft. to 100 ft.  
 Thickness of Cover: 25 ft. to 80 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 12, Sec. 35, Twp. 47, Rge. 20, W. 5th Mer.  
 Coal Mining Lease Numbers: 5662, 5663.  
 Mine located on C.N.R.  
 Registered Trade Name: Sterling Coal.

**Foothills Collieries Ltd.—Mine No. 771**  
 Authorized Capital: \$300,000.00.  
 Name of President: A. E. Windatt.  
 Names of Directors: E. H. Bennest, K.C., H. Wallace, Rt. Hon. Lord Gort.  
 Mine Office: Foothills, Alberta.  
 General Manager: A. E. Windatt.  
 Mine Manager: William Morris.  
 Mine Surveyor: L. C. Stevens.  
 Overmen: Edward Griffiths, Walter Smillie.  
 Firebosses: J. E. Mitchell, John Hogg, Evan Richards, Russell Butts, Harold Rhodes.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 0 to 800 ft.  
 Inclination of Seam: 22 degrees.  
 Form of Opening: Slope. Size of Slope: 10 ft. x 12 ft. Depth of Slope: 2,350 ft.  
 Location of Mine: L.S. 2, 7, 10 and 15, Sec. 24, Twp. 47, Rge. 20, W. 5th Mer.  
 Coal Mining Lease Number: 5344.  
 Mine located on C.N.R.  
 Registered Trade Name: Foothills Coal.

**Lakeside Coals Ltd.—Mine No. 775**

Authorized Capital: \$500,000.00.  
 Name of President: B. J. Kern.  
 Names of Directors: A. Booker, Roy Trumble, Lorne Kerr.  
 Name of Secretary-Treasurer: Lorne Kerr.  
 Mine Office: Robb, Alberta.  
 General Manager: Roy Trumble.  
 Mine Manager: William Slominski.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: Bob Stratton.  
 Blasters: Bob Stratton, William Birrel.  
 Thickness of Seam: 6 ft. to 10½ ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: 38 degrees.  
 Form of Opening: Strip Mine.  
 Location of Mine: S.W. ¼ of L.S. 12, Sec. 14, Twp. 49, Rge. 21, W. 5th Mer.  
 Coal Mining Lease Number: 5318.  
 Mine located on C.N.R.  
 Registered Trade Name: Balkans Coal.

**McLeod River Hard Coal Co. (1941) Ltd.—Mine No. 846**

Authorized Capital: \$50,000.00.  
 Name of President: Norman R. Whittall.  
 Names of Directors: F. R. Graham, G. Kidd, F. B. Brown, J. A. Boyd, H. R. Plommer.  
 Name of Secretary-Treasurer: S. V. Isaacson.  
 Head Office: Marine Building: Vancouver, B.C.  
 Mine Office: Mercoal, Alberta.  
 General Manager: H. R. Plommer.  
 Mine Manager: L. G. Chavignaud.  
 Mine Surveyor: L. G. Chavignaud.  
 Overman: J. Rochester.  
 Firebosses: R. Bossite, J. Parry, J. Lidgett, J. Keef, A. McIntyre, G. Murry, E. Price, W. James, H. Dombreski, G. McMurry.  
 Thickness of Seam: 11 ft.  
 Thickness of Cover: 0 to 800 ft.  
 Inclination of Seam: 25 degrees to 45 degrees.  
 Form of Opening: Slope. Size of Slope: 8 ft. x 12 ft. Depth of Slope: 1,800 ft.  
 Location of Mine: L.S. 4, Sec. 25, Twp. 48, Rge. 22, W. 5th Mer.  
 Coal Mining Lease Number: 1605.  
 Mine located on C.N.R.  
 Registered Trade Name: McLeod River Hard Coal.

**Coal Valley Mining Co. Ltd.—Mine No. 1002**

Authorized Capital: \$1,000,000.00.  
 Name of President: C. B. Munson.  
 Names of Directors: S. W. Field, C. B. Munson, H. R. Milner, F. J. Mitchell, W. F. Stevenson.  
 Name of Secretary-Treasurer: W. C. Willetts.  
 Head Office: 705 McLeod Building, Edmonton, Alberta.  
 Mine Office: Coal Valley, Alberta.  
 General Manager: W. F. Stevenson.  
 Mine Manager: A. A. Fraser.  
 Mine Surveyor: A. A. Fraser.  
 Thickness of Seam: 150 ft. to 300 ft.  
 Thickness of Cover: 20 ft. to 120 ft.  
 Inclination of Seam: 40 degrees.  
 Form of Opening: Strip Mine.  
 Location of Mine: W. ½ of L.S. 10, Sec. 25, Twp. 47, Rge. 20, W. 5th Mer.

Mine located on C.N.R.

Registered Trade Name: Cova Coal.

#### **King Coal & Lumber Co.—Mine No. 1692**

Authorized Capital: \$20,000.00.

Name of President: H. H. Croxton.

Names of Directors: H. H. Croxton, D. B. Croxton, H. E. Croxton.

Name of Secretary-Treasurer: H. E. Croxton.  
Head Office: 10226 116 Street, Edmonton, Alberta.

Mine Office: Coalspur, Alberta.

General Manager: H. H. Croxton.

Mine Manager: Michael S. Karpach.

Mine Surveyor: David Jones.

Thickness of Seam: 33 ft.

Inclination of Seam: 63 degrees.

Form of Opening: Strip Mine.

Location of Mine: L.S. 7, Sec. 33, Twp. 48, Rge. 21, W. 5th Mer.

Coal Mining Lease Numbers: 5724, 5725.

C.N.R. and Truck Mine.

Registered Trade Name: King Coal.

#### **CROWSNEST AREA**

#### **West Canadian Collieries Ltd.—Mine No. 87**

Authorized Capital: \$2,900,000.00.

Name of President: Edouard Rasson.

Names of Directors: Mr. Barnard, Mr. Dunnin, Mr. Decoster, Mr. Beaubien.

Name of Secretary: G. H. Labyt.

Head Office: 833 Salisbury House, London Wall, London, England.

Mine Office: Bellevue, Alberta.

Mine Manager: M. H. Congdon.

Mine Surveyor: L. M. Dwarkin.

Overmen: Dan Rees, P. Goodwin, G. Goodwin, A. Grant, D. Hutton.

Firebosses: S. Comin, J. McLeod, J. Radford, A. Emmerson, W. Alexander, P. McLafferty, J. Senycz, C. Olitch, J. Michayluk, D. Morris, G. Cousena, K. Wollney.

Thickness of Seam: 11 ft.

Thickness of Cover: 0 to 1,600 ft.

Inclination of Seam: 0 to 90 degrees.

Form of Opening: Adit.

Location of Mine: L.S. 10, Sec. 20, Twp. 7, Rge. 3, W. 5th Mer.

Coal Mining Lease Number: M.S. 231.

C.P.R. and Truck Mine.

Registered Trade Name: Bellevue Coal.

#### **International Coal & Coke Co. Ltd.—Mine No. 88**

Authorized Capital: \$3,000,000.00.

Name of President: H. A. Howard.

Names of Directors: H. A. Howard, R. G. Anderson, A. J. Johansson, J. Buchanan, James Black, H. Davidson, R. R. McNaughton, G. A. Wallinger, G. M. Warren. Name of Secretary: P. A. Dickeson.

Name of Treasurer: Joseph Emmerson.

Mine Office: Coleman, Alberta.

General Manager: J. J. McIntyre.

Mine Manager: W. B. Fraser.

Mine Surveyor: H. E. Hewitt.

Overmen: A. J. Brown, A. Tiberghein, E. Hill, J. Marconi.

Firebosses: J. Hillary, J. V. Fraser, J. P. McIntyre, L. C. Richards, A. Jones, J. Moore, Sr., P. Topak, L. Hotte, A. J. Phillips, V. Brown, R. Woods, J. Lowe, T. Donaldson, G. Marconi, B. Fontana, T. DeCocco.

Thickness of Seam: 5 to 12 ft.

Thickness of Cover: 2,000 ft.

Inclination of Seam: 30 degrees.

Form of Opening: Slope. Size of Slope: 12 ft. x 10 ft. Depth of Slope: 3,400 ft.

Location of Mine: L.S. 11, Sec. 8, Twp. 8, Rge. 4, W. 5th Mer.

Coal Mining Lease Number: 2886.

C.P.R. and Truck Mine.

Registered Trade Name: International Coal.

#### **Hillcrest-Mohawk Collieries Ltd.—Mine No. 133**

Authorized Capital: \$1,250,000.00.

Name of President: John Gordon.

Names of Directors: John Gordon, Eric Richardson, F. J. Harquail, Colin Kemp, Mervin Graves, Eva Johnson.

Name of Secretary: F. J. Harquail.

Name of Treasurer: Eric Richardson.

Mine Office: Bellevue, Alberta.

General Manager: Frank J. Harquail.

Mine Manager: Wm. Goodwin.

Mine Surveyor: A. E. Williams.

Overmen: John Ironmonger, J. Shearer, J. Curry, M. Bianchini.

Firebosses: R. Clarke, Alfred White, Louis Luini, John F. Griffiths, Jack Maddison, Armond Bianchini, Robert Kerr, John Cresel, Bruno Tamborini, Vendel Molnar, Andrew Craig, John McDade, Ernie Lawrence, Joe Zeinek, John Makin, George Fry.

Thickness of Seam: 10 ft.

Thickness of Cover: 800 ft.

Inclination of Seam: 5 degrees to vertical.

Form of Opening: Slope.

Location of Mine: S.W. 1/4 of Sec. 21, Twp. 7, Rge. 3, W. 5th Mer.

Coal Mining Lease Number: C.L.S.

C.P.R. and Truck Mine.

Registered Trade Name: Hillcrest-Mohawk Coal.

#### **Beaver Mines Coal Co.—Mine No. 199**

Authorized Capital: \$10,000.00.

Mine Office: Beaver Mines, Alberta.

Mine Manager: D. Pollo, Sr.

Mine Surveyor: F. W. Utley.

Overman: D. Pollo, Sr.

Thickness of Seam: 4 ft. to 7 ft.

Thickness of Cover: 70 ft.

Inclination of Seam: 30 to 40 degrees.

Form of Opening: Drift.

Location of Mine: L.S. 10, Sec. 3, Twp. 6, Rge. 2, W. 5th Mer.

Coal Mining Lease Number: 5668.

Mine located on C.P.R.

Registered Trade Name: Beaver Mine Coal.

#### **McGillivray Creek Coal & Coke Co.—Mine No. 204**

Authorized Capital: \$3,000,000.00.

Name of President: H. A. Howard.

**Names of Directors:** H. A. Howard, A. L. Johansson, R. G. Anderson, G. A. Wallinger, R. R. McNaughton, G. M. Warren, H. A. Thoeny.

**Name of Secretary-Treasurer:** S. C. Short.

**Mine Office:** Coleman, Alberta.

**General Manager:** John J. McIntyre.

**Mine Manager:** Andrew Wilson.

**Mine Surveyor:** A. E. Graham.

**Overmen:** E. Allen, W. Lonsbury, W. Anderson.

**Firebosses:** A. Beveridge, R. Campbell, R. Campbell, A. Galbraith, W. Hopkins, M. Kubica, Jr., R. Morris, J. Ondrik, A. Panek, R. Parry, J. J. Sikora, H. Unwin, L. Vasek, E. Krywolt.

**Thickness of Seam:** No. 2 Seam—9 ft. No. 4 Seam—4½ ft.

**Thickness of Cover:** 0 to 2,400 ft.

**Inclination of Seam:** 35 degrees.

**Form of Opening:** Slope. Size of Slope: 8 ft. x 12 ft. Depth of Slope: 4,500 ft.

**Location of Mine:** S.W. ¼ of L.S. 2, Sec. 17, Twp. 8, Rge. 4, W. 5th Mer.

**Coal Mining Lease Numbers:** 305 S.L., 5501, 5673.

**C.P.R. and Truck Mine.**

**Registered Trade Name:** McGillivray Creek Coal.

#### West Canadian Collieries Ltd.—Mine No. 396

**Authorized Capital:** \$2,900,000.00.

**Name of President:** Edouard Rasson.

**Names of Directors:** Mr. Bernard, Mr. Dunnинг, Mr. Decoster, Mr. Beaubien.

**Name of Secretary:** G. H. Labyt.

**Head Office:** 833 Salisbury House, London Wall, London, England.

**Mine Office:** Blairmore, Alberta.

**General Manager:** J. A. Brusset.

**Mine Manager:** T. E. Morgan.

**Mine Surveyor:** D. T. Brown.

**Overman:** M. Hamilton, L. Hucik, R. Tongue, J. Davies.

**Firebosses:** G. Gibson, C. Cartwright, C. Millar, A. Tiberg, V. Blas, S. Patterson, J. Patterson, A. Rae, R. Draper, J. McIssac, A. Evans, R. Blake, J. Sharett, D. McLafferty, I. Walker.

**Thickness of Seam:** 5 ft. to 16 ft.

**Thickness of Cover:** 0 to 1,000 ft.

**Inclination of Seam:** 40 degrees.

**Form of Opening:** Adit.

**Location of Mine:** L.S. 10, Sec. 2, Twp. 8, Rge. 4, W. 5th Mer.

**Coal Mining Lease Numbers:** C.L.S. 125, 506.

**C.P.R. and Truck Mine.**

**Registered Trade Name:** Greenhill Coal.

#### West Canadian Collieries Ltd.—Mine No. 1584

**Authorized Capital:** \$2,900,000.00.

**Name of President:** Edouard Rasson.

**Names of Directors:** Mr. Bernard, Mr. Dunnинг, Mr. Decoster, Mr. Beaubien.

**Name of Secretary:** G. H. Labyt.

**Head Office:** 833 Salisbury House, London Wall, London, England.

**Mine Office:** Bellevue, Alberta.

**General Manager:** J. A. Brusset.

**Mine Manager:** N. Melnyk.

**Mine Surveyor:** L. Dwarkin.

**Overman:** R. Blake, C. MacDonald.

**Firebosses:** K. MacDonald, J. Morris, C. Dambois, W. Donaldson, D. Rees, H. Hurlbut.

**Thickness of Seam:** 12 ft.

**Thickness of Cover:** 100 ft. to 500 ft.

**Inclination of Seam:** 14 to 70 degrees.

**Form of Opening:** Adit.

**Location of Mine:** L.S. 15, Sec. 31, Twp. 6, Rge. 3, W. 5th Mer.

**Coal Mining Lease Numbers:** M.S. 94, M-174. C.P.R. Mine.

**Registered Trade Name:** Adanac Coal.

#### Hillcrest-Mohawk Collieries Ltd.—Mine No. 1695

**Authorized Capital:** \$1,250,000.00.

**Name of President:** John Gordon.

**Names of Directors:** John Gordon, Eric Richardson, F. J. Harquail, Colin Kemp, Mervin Graves, Eva Johnson.

**Name of Secretary:** Frank J. Harquail.

**Name of Treasurer:** Eric Richardson.

**Mine Office:** Bellevue, Alberta.

**General Manager:** Frank J. Harquail.

**Mine Manager:** Henry Miller.

**Mine Surveyor:** A. E. Williams.

**Foremen:** O. Bohle, J. Patterson, T. Dunlop, A. Livingstone.

**Blaster:** J. Patterson.

**Thickness of Seam:** 200 ft.

**Thickness of Cover:** 50 ft.

**Inclination of Seam:** Vertical.

**Form of Opening:** Strip Mine.

**Location of Mine:** Twp. 7, Rge. 6, W. 5th Mer.

**Coal Mining Lease Number:** 5710, Freehold.

**C.P.R. and Truck Mine.**

**Registered Trade Name:** Tent Mountain Coal.

#### DRUMHELLER AREA

##### Rosedale Collieries Ltd.—Mine No. 346

**Authorized Capital:** \$600,000.00.

**Name of President:** J. R. Brodie.

**Names of Directors:** J. R. Brodie, F. H. Nord, J. F. Harvie, C. H. Doerr.

**Name of Secretary-Treasurer:** J. F. Harvie. **Head Office:** 909 Lancaster Building, Calgary, Alberta.

**Mine Office:** Rosedale, Alberta.

**Superintendent:** R. Richards.

**Mine Manager:** T. Rappel.

**Mine Surveyor:** R. Richards.

**Overmen:** R. Bradshaw, Wm. Jones.

**Firebosses:** J. Zambo, S. Berlando, F. Kubicek, J. Ewing, A. Sladek, W. Roberts, R. Sladek.

**Thickness of Seam:** 3 ft. to 6½ ft.

**Thickness of Cover:** 450 ft.

**Inclination of Seam:** Horizontal.

**Form of Opening:** Shaft. Size of Shaft: 11 ft. x 15 ft. Depth of Shaft: 45 ft.

**Location of Mine:** L.S. 14, Sec. 28, Twp. 28, Rge. 19, W. 4th Mer.

**Coal Mining Lease Numbers:** 5038, 5039.

**C.N.R., C.P.R. and Truck Mine.**

**Registered Trade Name:** Rosedale Coal.

**Midland Coal Mining Co. Ltd.—Mine No. 367**

Authorized Capital: \$50,000.00.

Name of President: Mrs. S. L. McMullen.

Names of Directors: S. G. McMullen, W. R. Sandecock.

Name of Secretary: S. G. McMullen.

Mine Office: Drumheller, Alberta.

Mine Manager: William Hibbert.

Mine Surveyor A. G. Macaulay.

Overman: H. Looten.

Firebosses: J. Evans, G. Biro, M. Bobrosky, C. Boughton, F. DeBernardo, R. Forshaw, T. Gibson, W. Holowatiuk, J. Jubb, A. McKinnon.

Thickness of Seam: 5 ft.

Thickness of Cover: Up to 520 ft.

Inclination of Seam: Horizontal.

Form of Opening: Shaft. Size of Shaft: 9 ft. x 19 ft. Depth of Shaft: 135 ft.

Location of Mine: L.S. 14, Sec. 9, Twp. 29, Rge. 20, W. 4th Mer.

Coal Mining Lease Numbers: 5068, 5626, 5496.

C.N.R. and C.P.R. Mine.

Registered Trade Name: Midland and Mercury Coal.

**Red Deer Valley Coal Co.—Mine No. 402**

Authorized Capital: \$347,100.00.

Name of President: Wm. S. Howland.

Names of Directors: Mary A. Howland, Wm. S. Howland, Louise Howland, W. H. Patterson.

Name of Secretary: Ward H. Patterson.

Head Office: Drumheller, Alberta.

Mine Office: Naemine, Alberta.

General Manager: U. S. Ansley.

Mine Manager: I. Potter.

Mine Surveyor: A. G. Macaulay.

Overmen: A. F. Courterelie, J. Barrie.

Firebosses: I. Folden, C. Levesque, C. Atkinson, P. Goods, H. Roberts, G. Anderson, J. Elliott, N. S. Duncan.

Thickness of Seam: 5 ft. to 6 ft.

Thickness of Cover: 190 ft. to 550 ft.

Inclination of Seam: Horizontal.

Form of Opening: Slope. Size of Slope: 11 ft. x 7 ft. Depth of Slope: 650 ft. at 17 degrees.

Location of Mine: Sec. 7, Twp. 29, Rge. 20, W. 4th Mer.

Coal Mining Lease Numbers: 5196, 5239, 5556, 5606, 5629.

C.N.R., C.P.R. and Truck Mine.

Registered Trade Name: Glococoal.

**Century Coals Ltd.—Mine No. 422**

Name of President: Brig L. Patrick.

Head Office: Calgary, Alberta.

Mine Office: Drumheller, Alberta.

General Manager: Brig L. Patrick.

Mine Manager: A. C. Hnatyshyn.

Mine Surveyor: A. C. Hnatyshyn.

Overmen: D. Mayoh, R. Raisbeck.

Firebosses: W. Morse, R. Halbert, M. Treve- thin, J. Barick, J. Oxbury, R. Keith, A. Thomson.

Thickness of Seam: 4 ft. 9 in.

Thickness of Cover: 600 ft.

Inclination of Seam: Horizontal.

Form of Opening: Shaft. Size of Shaft: 12 ft. x 20 ft. Depth of Shaft: 166 ft.

Location of Mine: L.S. 5, Sec. 9, Twp. 29, Rge. 20, W. 4th Mer.

Coal Mining Lease Number: 2379.

C.N.R., C.P.R. and Truck Mine.

Registered Trade Name: Commander Coal.

**Rosedale Collieries Ltd.—Mine No. 436**

Authorized Capital: \$600,000.00.

Name of President: J. R. Brodie.

Name of Directors: J. R. Brodie, F. H. Nord, J. F. Harvie, C. H. Doerr.

Name of Secretary-Treasurer: J. F. Harvie.

Head Office: 909 Lancaster Building, Calgary, Alberta.

Mine Office: Rosedale, Alberta.

Superintendent: R. Richards.

Mine Manager: T. Rappel.

Mine Surveyor: R. Richards.

Overman: S. Appleby.

Firebosses: E. Davis, I. C. Radocy, T. Sterko, P. Kenakin, P. Ludwig.

Thickness of Seam: 6½ ft.

Thickness of Cover: 500 ft.

Inclination of Seam: Horizontal.

Form of Opening: Adit.

Location of Mine: S.E. ¼ of L.S. 7, Sec. 28,

Rge. 19, W. 4th Mer.

Coal Mining Lease Numbers: 5104, 5105.

C.N.R. and C.P.R. Mine.

Registered Trade Name: Star Coal.

**Newcastle Collieries Ltd.—Mine No. 620**

Authorized Capital: \$300,000.00.

Name of President: W. Gouge.

Names of Directors: J. Gouge, W. Gouge, J. Cook, R. E. Coyle.

Name of Secretary-Treasurer: J. Gouge.

Mine Office: Drumheller, Alberta.

General Manager: J. Gouge.

Mine Manager: J. Robertson.

Overmen: J. McCutcheon, A. K. Burrell.

Firebosses: A. Armstrong, W. B. Henry, J. Whitehead, E. Harris, C. Dunn, C. Currie.

Thickness of Seam: 5 ft.

Thickness of Cover: 500 ft.

Inclination of Seam: Horizontal.

Form of Opening: Shaft. Size of Shaft: 10 ft. x 12 ft. Depth of Shaft: 100 ft.

Location of Mine: S.W. ¼ of Sec. 3, Twp. 29, Rge. 20, W. 4th Mer.

Coal Mining Lease Numbers: 5046, 5052.

C.N.R., C.P.R. and Truck Mine.

Registered Trade Name: Newcastle Coal.

**Maple Leaf Coal Co. Ltd.—Mine No. 728**

Authorized Capital: \$100,000.00.

Name of President: D. H. Smith.

Names of Directors: D. H. Smith, N. F. Priestley, E. B. Chown, Jake Frey, C. A. Fawcett.

Name of Secretary-Treasurer: N. F. Priestley.

Mine Office: Drumheller, Alberta.

General Manager: D. H. Smith.

Mine Manager: J. M. Clyne.

Mine Surveyor: A. G. Macaulay.

Overman: T. Mitchell.

**Firebosses:** F. Kane, P. Timm, R. Marshall, J. Page.  
**Thickness of Seam:** 5 ft.  
**Thickness of Cover:** 200 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Drift.  
**Location of Mine:** L.S. 13, Sec. 32, Twp. 27, Rge. 18, W. 4th Mer.  
**Coal Mining Lease Number:** 5303.  
**C.N.R. and C.P.R. Mine.**  
**Registered Trade Name:** National Coal.

**Brilliant Coal Co.—Mine No. 1258**

**Authorized Capital:** \$300,000.00.  
**Name of President:** J. A. Sandino.  
**Mine Office:** Drumheller, Alberta.  
**General Manager:** J. A. Sandino.  
**Mine Manager:** R. Dunn.  
**Mine Surveyor:** L. C. Stevens.  
**Overman:** James Sount.  
**Firebosses:** T. McNeill, R. Stocco, J. March, F. Elkes.  
**Thickness of Seam:** 6 ft.  
**Thickness of Cover:** 400 ft. to 450 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Shaft and Slope. Size of Shaft: 8 ft. x 12 ft. Depth of Shaft: 120 ft. Size of Slope: 6 ft. x 8 ft. Depth of Slope: 450 ft.  
**Location of Mine:** L.S. 14, Sec. 10, Twp. 29, Rge. 20, W. 4th Mer.  
**Coal Mining Lease Number:** 5282.  
**C.N.R., C.P.R. and Truck Mine.**  
**Registered Trade Name:** Brilliant Coal.

**Saskatchewan Federated Co-ops Ltd.—Mine No. 1299**

**Authorized Capital:** \$10,000,000.00.  
**Name of President:** G. Urwin.  
**Name of Directors:** C. R. Smith, L. L. Lloyd, J. A. Bryson, G. Urwin, O. A. Herde, J. Gray, W. E. Mills, L. J. Bright, J. B. Bryson, H. C. Watson, C. P. Baker.  
**Name of Secretary:** H. L. Fowler.  
**Name of Treasurer:** E. T. Mowbrey.  
**Head Office:** Saskatoon, Saskatchewan.  
**Mine Office:** East Coulee, Alberta.  
**General Manager:** J. T. Burton.  
**Mine Manager:** J. T. Burton.  
**Mine Surveyor:** A. G. Macaulay.  
**Overman:** J. Gallagher.  
**Firebosses:** W. McFegan, G. Unsworth, M. Morel, R. Stratton.  
**Thickness of Seam:** 6 ft.  
**Thickness of Cover:** 300 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Drift.  
**Location of Mine:** S.E. ¼ of Sec. 32, Twp. 27, Rge. 18, W. 4th Mer.  
**Coal Mining Lease Number:** 5349.  
**C.N.R. and C.P.R. Mine.**  
**Registered Trade Name:** Empire Coal.

**Hy-Grade Coal Mining Co. Ltd.—Mine No. 1421**

**Authorized Capital:** \$10,000,000.00.  
**Name of President:** G. Urwin.  
**Names of Directors:** C. R. Smith, L. L. Lloyd, J. A. Bryson, O. A. Herde, G. Urwin, J.

Gray, W. E. Mills, L. J. Bright, J. B. Bryson, H. C. Watson, G. P. Baker.  
**Name of Secretary:** H. L. Fowler.  
**Name of Treasurer:** E. T. Mowbrey.  
**Head Office:** Saskatoon, Saskatchewan.  
**Mine Office:** Drumheller, Alberta.  
**General Manager:** J. T. Burton.  
**Mine Manager:** J. Robertson.  
**Mine Surveyor:** J. Robertson.  
**Overmen:** J. Burton, J. Farmer.  
**Firebosses:** F. J. Keough, E. Farmer, N. Blackett, J. Chuppe, P. Snow, H. Darbyshire, J. Taylor.  
**Thickness of Seam:** 3½ ft. to 9 ft.  
**Thickness of Cover:** 400 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Shaft. Size of Shaft: 8 ft. x 15 ft. Depth of Shaft: 88 ft.  
**Location of Mine:** L.S. 13, Sec. 11, Twp. 29, Rge. 20, W. 4th Mer.  
**Coal Mining Lease Number:** 2458.  
**C.N.R., C.P.R. and Truck Mine.**  
**Registered Trade Name:** Hy-Grade Coal.

**Royalty Coal Mining Co.—Mine No. 1436**

**Name of President:** Ferral Jenson.  
**Name of Secretary:** Helge Pedersen.  
**Mine Office:** Wayne, Alberta.  
**Mine Manager:** Fred Ellison.  
**Mine Surveyor:** A. Hamilton.  
**Overman:** Fred Ellison.  
**Fireboss:** Fred Ellison.  
**Thickness of Seam:** 3 ft. 2 in.  
**Thickness of Cover:** 200 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Drift.  
**Location of Mine:** L.S. 13, Sec. 20, Twp. 28, Rge. 19, W. 4th Mer.  
**Coal Mining Lease Number:** C.P.R. 566A.  
**Truck Mine.**  
**Registered Trade Name:** Royalty Coal.

**Century Coals Ltd.—Mine No. 1484**

**Name of President:** L. Patrick.  
**Head Office:** 228 Examiner Building, Calgary, Alberta.  
**Mine Office:** East Coulee, Alberta.  
**Mine Manager:** Hugh Crawford.  
**Mine Surveyor:** A. Hnatyshyn.  
**Overman:** Stanley Mather.  
**Firebosses:** J. MacKenzie, A. James, F. Kerr, P. Premoroko, J. Raisbeck, A. Andrew W. Koehler, S. Oleksy, B. Waggoner.  
**Thickness of Seam:** 5 ft. 2 in.  
**Thickness of Cover:** 200 ft. to 400 ft.  
**Inclination of Seam:** Horizontal.  
**Form of Opening:** Drift.  
**Location of Mine:** N.W. ¼ of L.S. 13, Sec. 21, Twp. 27, Rge. 18, W. 4th Mer.  
**Coal Mining Lease Numbers:** C.P.R. 534A, 601.  
**C.N.R., C.P.R. and Truck Mine.**  
**Registered Trade Name:** New Wildfire Coal.

**Murray Collieries Ltd.—Mine No. 1491**

**Authorized Capital:** \$100,000.00.  
**Name of President:** H. K. Reed.  
**Names of Directors:** H. K. Reed, C. McVeigh.  
**Mine Office:** East Coulee, Alberta.

Superintendent: James Fyvie.  
 Mine Manager: Hugh G. MacKinnon.  
 Mine Surveyor: L. C. Stevens.  
 Overman: Thomas McDonald.  
 Firebosses: J. Cotterill, W. Herman, J. Bachynski, Wm. L. Shepherd, R. Anderson, R. Steven, W. H. Mullinger, A. B. Raisbeck.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 300 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: S.E. ¼ of Sec. 29, Twp. 27, Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 539.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: New Murray Coal.

**Western Gem & Jewel Collieries—Mine No. 1493**

Authorized Capital: \$70,000.00.  
 Name of President: Alex Robertson.  
 Names of Directors: Stewart Robertson, D. M. Henderson, R. K. Northey, J. T. A. Gamble, H. H. Albright.  
 Name of Secretary-Treasurer: H. H. Albright.  
 Head Office: 607 Lancaster Building, Calgary, Alberta.  
 Mine Office: Cambria, Alberta.  
 General Manager: Alex Robertson.  
 Mine Manager: N. Howells.  
 Mine Surveyor: John Robertson.  
 Overman: John Conlia.  
 Firebosses: R. Niblett, F. Zaputil, Jr., W. Allen, J. Crawford, M. Vandekinder, J. Wilinson, J. McLellan.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 400 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 1, 2 and 14, Sec. 15, Twp. 28, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: 5541.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Cambrian Coal.

**Aetna Coals Ltd.—Mine No. 1511**

Authorized Capital: \$50,000.00.  
 Name of President: J. J. O'Dwyer.  
 Names of Directors: J. J. O'Dwyer, M. A. O'Dwyer.  
 Name of Secretary-Treasurer: M. A. O'Dwyer.  
 Head Office: Wayne, Alberta.  
 Mine Office: Cambria, Alberta.  
 General Manager: M. A. O'Dwyer.  
 Mine Manager: W. Sarsfield.  
 Mine Surveyor: A. Hamilton.  
 Overman: W. Sarsfield.  
 Fireboss: M. Ramsay.  
 Thickness of Seam: 7 ft.  
 Thickness of Cover: 0 to 240 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 10 ft. x 6 ft. Depth of Slope: 120 ft.  
 Location of Mine: L.S. 1, Sec. 22, Twp. 28, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: 5039.  
 C.N.R. and C.P.R. Mine.  
 Registered Trade Name: Aetna Coal.

**The Minute Coal Co.—Mine No. 1520**

Mine Office: Drumheller, Alberta.  
 General Manager: J. A. McKenzie.  
 Mine Manager: James Sinclair.  
 Mine Surveyor: A. G. Macaulay.  
 Fireboss: J. Sinclair.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 150 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 3, 6 and 11, Sec. 14, Twp. 29, Rge. 20, W. 4th Mer.  
 Coal Mining Lease Number: 2793.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Good Quality Coal.

**Wayne Coal Co. Ltd.—Mine No. 1570**

Authorized Capital: \$10,000.00.  
 Name of President: J. J. O'Dwyer.  
 Names of Directors: J. J. O'Dwyer, M. A. O'Dwyer.  
 Name of Secretary-Treasurer: M. A. O'Dwyer.  
 Head Office: Wayne, Alberta.  
 Mine Office: Cambria, Alberta.  
 General Manager: M. A. O'Dwyer.  
 Mine Manager: R. Stevenson.  
 Mine Surveyor: A. Hamilton.  
 Overman: R. Stevenson.  
 Thickness of Seam: 7 ft.  
 Thickness of Cover: 40 ft. to 260 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 8 ft. x 6 ft. Depth of Slope: 150 ft.  
 Location of Mine: N.E. ¼ of L.S. 8, Sec. 7, Twp. 28, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: Freehold.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Sovereign Coal.

**Monarch Coal Mining Co. Ltd.—Mine No. 1573**

Authorized Capital: \$311,500.00.  
 Name of President: E. A. Lovett.  
 Names of Directors: T. C. Boyd, D. MacNeil, E. A. Lovett, H. R. Narraway, O. I. Gilbert.  
 Name of Sec.-Treas.: H. R. Narraway  
 Head Office: 405A 8th Avenue West, Calgary, Alberta.  
 Mine Office: East Coulee, Alberta.  
 General Manager: E. A. Lovett.  
 Mine Manager: T. Smith.  
 Mine Surveyor: T. Smith.  
 Overman: J. Harries.  
 Firebosses: A. Black, E. Simpson, R. Cowan, N. Morrison, J. Tennant, M. Honeyman, A. Wolff, W. Menzies.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 0 to 400 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 1, Sec. 20, Twp. 27, Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 587.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Western Monarch Coal.

**Arcadia Coal Mines Ltd.—Mine No. 1589**

Authorized Capital: \$50,000.00.  
 Name of Director: Peter Carls.  
 Name of Secretary: J. V. H. Milvain.  
 Head Office: 405 MacLean Block, Calgary,  
 Alberta.  
 Mine Office: Willow Creek, Alberta.  
 General Manager: Peter Carls.  
 Mine Manager: Allan Hamilton.  
 Mine Surveyor: Allan Hamilton.  
 Overman: Allan Hamilton.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 0 ft. to 200 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 16, Sec. 7, Twp. 28  
 Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: 5432.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Purity Hard Coal.

**H. S. Chambers—Mine No. 1599**

Mine Office: Drumheller, Alberta.  
 General Manager: H. S. Chambers.  
 Mine Surveyor: A. G. Macaulay.  
 Foreman: H. S. Chambers.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 25 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 12, Sec. 23, Twp. 28,  
 Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: 5478.  
 Truck Mine.  
 Registered Trade Name: Burn-Brite Coal.

**J. Wakaruk & Partners—Mine No. 1655**

Name of President: George Wakaruk.  
 Names of Directors: Wm. Walker, Frank  
 Zayac.  
 Name of Secretary-Treasurer: John Wakaruk.  
 Mine Office: Drumheller, Alberta.  
 Mine Surveyor: A. G. Macaulay.  
 Overman: George Wakaruk.  
 Firebosses: John Walker, Wm. Walker.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 225 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x  
 6 ft. Depth of Slope: 85 ft.  
 Location of Mine: W. & E.  $\frac{1}{2}$  of L.S. 9 and 10,  
 Sec. 22, Twp. 29, Rge. 20, W. 4th Mer.  
 Coal Mining Lease Number: 5593.  
 Truck Mine.  
 Registered Trade Name: Cozy Coal.

**Allan Livingstone—Mine No. 1666**

Mine Office: Drumheller, Alberta.  
 Mine Manager: Allan Livingstone.  
 Mine Surveyor: A. G. Macaulay.  
 Foreman: Allan Livingstone.  
 Thickness of Seam: 3 ft. to 5 ft.  
 Thickness of Cover: 15 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 16, Sec. 16, Twp. 28,  
 Rge. 19, W. 4th Mer.  
 Coal Mining Lease Numbers: C.P.R. 630, 655.

Truck Mine.

Registered Trade Name: Livingstone Coal.

**Victor Leonhardt—Mine No. 1668**

Mine Office: Drumheller, Alberta.  
 Mine Manager: Victor Leonhardt.  
 Mine Surveyor: Allan Hamilton.  
 Foreman: Victor Leonhardt.  
 Thickness of Seam: 2 ft.  
 Thickness of Cover: 10 ft. to 30 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 3, Sec. 12, Twp. 29,  
 Rge. 20, W. 4th Mer.  
 Coal Mining Lease Number: 5641.  
 Truck Mine.  
 Registered Trade Name: Lion Coal.

**Young, Tinsley & Skinberg (Joy)—Mine No. 1669**

Mine Office: Cambria, Alberta.  
 General Manager: W. Young.  
 Mine Surveyor: A. Hamilton.  
 Overman: W. Young.  
 Fireboss: John Kushnir.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 300 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft. x  
 8 ft. Depth of Slope: 50 ft.  
 Location of Mine: L.S. 11, 12 and 13, Sec. 18,  
 Twp. 28, Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 668.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Joy Coal.

**David H. Jones—Mine No. 1688**

Mine Office: Nacline, Alberta.  
 Mine Manager: David H. Jones.  
 Mine Surveyor: A. G. Macaulay.  
 Foreman: David H. Jones.  
 Thickness of Seam: 1 $\frac{1}{2}$  ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. and S.  $\frac{1}{2}$  of L.S. 8 and 9  
 of Sec. 24, Twp. 29, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: 5718.  
 Truck Mine.  
 Registered Trade Name: Stockwell Coal.

**J. A. McLeod & C. C. Paxton—Mine No. 1700**

Authorized Capital: \$10,000.00.  
 Name of President: J. A. McLeod.  
 Names of Directors: J. A. McLeod, C. C.  
 Paxton, M. M. McDonald.  
 Name of Secretary-Treasurer: C. C. Paxton.  
 Head Office: Vancouver, B.C.  
 Mine Office: Drumheller, Alberta.  
 Mine Manager: J. A. McLeod.  
 Mine Surveyor: A. G. Macaulay.  
 Thickness of Seam: 2 ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 5 and 6, Sec. 1, Twp.  
 29, Rge. 20, W. 4th Mer.  
 Coal Mining Lease Number: 5812.  
 Truck Mine.  
 Registered Trade Name: Twin Hills Coal.

**EDMONTON AREA****Ottewell Coal Co.—Mine No. 91**

Authorized Capital: \$10,000.00.  
 Mine Office: Clover Bar, Alberta.  
 Mine Manager: W. J. Ottewell.  
 Mine Surveyor: L. C. Stevens.  
 Overman: W. J. Ottewell.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 80 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 7 ft. x 9 ft. Depth of Shaft: 80 ft.  
 Location of Mine: S.W.  $\frac{1}{4}$  L.S. 4, Sec. 17, Twp. 53, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: Ed. Sak Land Truck Mine.  
 Registered Trade Name: Clover Gem Coal.

**Great West Coal Co. Ltd.—Mine No. . . .**

Authorized Capital: \$92,000.00.  
 Name of President: A. C. Dunn.  
 Names of Directors: A. C. Dunn, Mayne Reid, W. S. Cupples.  
 Name of Secretary-Treasurer: Thomas S. Campbell.  
 Head Office: 10157 102 St., Edmonton, Alberta.  
 Mine Office: Clover Bar, Alberta.  
 General Manager: A. C. Dunn.  
 Mine Manager: Robert Dalziel.  
 Mine Surveyor: Robert A. Dunn.  
 Overman: Angus Park.  
 Firebosses: W. Thomson, D. Quaife, H. Harp-ham, R. Chalmers, J. Smith, G. Muir.  
 Thickness of Seam: 4 ft. to 6 $\frac{1}{2}$  ft.  
 Thickness of Cover: 140 ft. to 210 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope and Shaft. Size of Shaft: 6 ft. x 8 ft. Depth of Shaft: 1' 0 ft. to 180 ft. Size of Slope: 10 ft. x 6 ft. Depth of Slope: 140 ft.  
 Location of Mine: S.E.  $\frac{1}{4}$  L.S. 10, Sec. 7, Twp. 53, Rge. 23, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 235.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Blac's Diamond Coal.

**Sundance Mines Ltd.—Mine No. 129**

Authorized Capital: \$30,000.00.  
 Name of President: Paul H. Cote.  
 Names of Directors: L. P. Mousseau and C. Tucker.  
 Name of Secretary: P. E. Poirier.  
 Head Office 10043 Jasper Ave., Edmonton, Alberta.  
 Mine Office: Cardiff, Alberta.  
 General Manager: P. H. Cote.  
 Mine Manager: C. Christiaens.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: C. Christiaens.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 30 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N.E.  $\frac{1}{4}$  L.S. 16, Sec. 14, Twp. 55, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: 5669.  
 C.N.R., C.P.R., N.A.R. and Truck Mine.  
 Registered Trade Name: Suncole.

**Banner Coals Ltd.—Mine No. 428**

Authorized Capital: \$20,000.00.  
 Name of President: J. B. Starky.  
 Names of Directors: J. B. Starky, E. A. Mills.  
 Name of Secretary-Treasurer: E. A. Mills.  
 Head Office: 10631 92 St., Edmonton, Alberta.  
 Mine Office: Carbondale, Alberta.  
 General Manager: J. B. Starky.  
 Mine Manager: James Kellock.  
 Mine Surveyor: Willard T. Worthington, Jr.  
 Overman: James Kellock.  
 Firebosses: N. Neilson, J. Celli, D. Lamont, F. Ewing.  
 Thickness of Seam: 4 ft. 8 in.  
 Thickness of Cover: 175 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 12 ft. x 12 ft. Depth of Shaft: 175 ft.  
 Location of Mine: L.S. 10, Sec. 8, Twp. 55, Rge. 24, W. 4th Mer.  
 Coal Mining Lease: Pat R. Kelly.  
 C.N.R., C.P.R., N.A.R. and Truck Mine.  
 Registered Trade Name: Penn Coal.

**Long Coal Co. Ltd.—Mine No. 1098**

Authorized Capital \$10,000.00.  
 Mine Office: Namao, Alberta.  
 Mine Manager: M. L. Vitaly.  
 Mine Surveyor: L. C. Stevens.  
 Overman: M. L. Vitaly.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 98 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Tunnel.  
 Location of Mine: L.S. 4, Sec. 31, Twp. 54, Rge. 24, W. 4th Mer.  
 Coal Mining Lease: Pat G. S. Long.  
 Truck Mine.  
 Registered Trade Name: Hardite Coal.

**J. E. & J. A. McKinnon—Mine No. 1123**

Head Office: 10446 Connaught Drive, Edmonton, Alberta.  
 Mine Office: R.R. 5, Edmonton, Alberta.  
 Mine Manager: William Penne.  
 Mine Surveyor: David Jones.  
 Overman: William Penne.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 200 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 13, Sec. 31, Twp. 59, Rge. 26, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 670.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Devon Coal.

**Edmonton Collieries Ltd.—Mine No. 1265**

Authorized Capital: \$20,000.00.  
 Name of President: W. Gordon MacKay.  
 Names of Directors: W. Gordon MacKay, Harold W. Layton, C. C. Down.  
 Name of Secretary-Treasurer: Harold W. Layton.  
 Head Office: 10322 105 St., Edmonton, Alberta.  
 Mine Office: Namao, Alberta.  
 General Manager: W. Gordon MacKay.  
 Mine Manager: A. Crawford.  
 Mine Surveyor: L. C. Stevens.

Overman: A. Johnstone.  
 Fireboss: D. Watson.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 85 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft. x  
     7 ft. Depth of Slope: 375 ft.  
 Location of Mine: L.S. 14, Sec. 36, Twp. 54,  
     Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 596.  
 C.N.R., C.P.R., N.A.R., and Truck Mine.  
 Registered Trade Name: New Black Gem Coal.

**Samis Collieries Ltd.—Mine No. 1316**  
 Authorized Capital: \$55,500.00.  
 Head Office: 203 Wallace Building, Edmonton,  
     Alberta.  
 Mine Office: Namao, Alberta.  
 General Manager: K. E. Samis.  
 Mine Manager: A. B. Lister.  
 Mine Surveyor: L. C. Stevens.  
 Overman: A. B. Lister.  
 Fireboss: S. M. Samis.  
 Thickness of Seam: 8½ ft.  
 Thickness of Cover: 85 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x  
     6 ft. Depth of Slope: 150 ft.  
 Location of Mine: L.S. 6, Sec. 36, Twp. 54,  
     Rge. 25, W. 4th Mer.  
 Coal Mining Lease Numbers: 5539, 2861.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Samis Coal.

**Red Hot Coal Co. Ltd.—Mine No. 1357**  
 Authorized Capital: \$23,000.00.  
 Name of President: W. Fridel.  
 Names of Directors: W. Fridel, J. Lang, K.  
     Bruskiewicz, J. Gorski, S. Kubeczka, J.  
     Tworek.  
 Name of Secretary-Treasurer: J. Lang.  
 Mine Office: Forest Heights, Alberta.  
 General Manager: W. Fridel.  
 Mine Manager: A. Scott.  
 Mine Surveyor: L. C. Stevens.  
 Overman: A. Scott.  
 Fireboss: W. Aitken.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 190 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft. x  
     6 ft. Depth of Slope: 615 ft.  
 Location of Mine: River Lot 33, Edmonton  
     Settlement.  
 Coal Mining Lease Number: 5052, M.S. 632.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Red Hot Coal.

**Beverly Coal Co. Ltd.—Mine No. 1366**  
 Authorized Capital: \$20,000.00.  
 Name of President: L. H. Davidson.  
 Names of Directors: L. H. Davidson, A. V.  
     Carlson, Thos. E. Hays.  
 Name of Secretary: J. McCartney.  
 Name of Treasurer: Thos. E. Hays.  
 Mine Office: Beverly, Alberta.  
 General Manager: L. H. Davidson.  
 Mine Manager: Hugh Brown.  
 Mine Surveyor: L. C. Stevens.

Overman: Albert Williams.  
 Examiner: Fred Price.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 130 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 16 ft.  
     x 8 ft. Depth of Shaft: 140 ft.  
 Location of Mine: L.S. 6, Sec. 13, Twp. 53,  
     Rge. 24, W. 4th Mer.  
 Coal Mining Lease: H.B.C.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Beverly Coal.

**Ottewell Coal Co.—Mine No. 1393**

Authorized Capital: \$10,000.00.  
 Mine Office: Clover Bar, Alberta.  
 Mine Manager: W. J. Ottewell.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: C. Ottewell.  
 Thickness of Seam: 6½ ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Block X, N.E. ¼ Sec. 36,  
     Twp. 52, Rge. 24, W. 4th Mer.  
 Registered Trade Name: Marvel Coal.

**Pine Creek Collieries—Mine No. 1419**

Head Office: 10263 112 St., Edmonton, Alberta.  
 Mine Office: Ellerslie, Alberta.  
 General Manager: Roy Voice.  
 Mine Manager: S. Fridel.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: S. Fridel.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 45 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 4, Sec. 25, Twp. 51,  
     Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 331.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Pine Creek Coal.

**Riverdale Coal Co. Ltd.—Mine No. 1463**

Authorized Capital: \$10,000.00.  
 Name of President: John Mather.  
 Names of Directors: John Mather, Anne  
     Mather, Cecile Mather.  
 Name of Secretary: Cecile Mather.  
 Name of Treasurer: Anne Mather.  
 Head Office: 10311 Saskatchewan Drive, Edmonton, Alberta.  
 Mine Office: Namao, Alberta.  
 General Manager: John Mather.  
 Mine Manager: M. D. McLean.  
 Mine Surveyor: David Jones.  
 Overman: C. Crawford.  
 Firebosses: John Paches, Jack Painter.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: N.E. Corn. L.S. 14, Sec. 5,  
     Twp. 55, Rge. 24, W. 4th Mer.  
 C.N.R., C.P.R. and Truck Mine.  
 Registered Trade Name: Dependable Coal.

**G. S. Gwilliam and K. Samis—Mine No. 1496**

Authorized Capital: \$88,000.00.  
 Name of President: K. E. Samis.  
 Names of Directors: K. E. Samis, D. J. Gwilliam.  
 Name of Secretary-Treasurer: D. J. Gwilliam.  
 Head Office: 203 Wallace Building, Edmonton, Alberta.  
 Mine Office: Namao, Alberta.  
 General Manager: K. E. Samis.  
 Mine Manager: Daniel Jones.  
 Mine Surveyor: L. C. Stevens.  
 Overman: Daniel Jones.  
 Fireboss: Allan P. Samis.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 80 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 3, Sec. 6, Twp. 55, Rge. 24, W. 4th Mer.  
 Coal Mining Lease Numbers: 5456, 653.  
 Registered Trade Name: Black Beauty Coal.

**Egg Lake Coal Co.—Mine No. 1582**

Mine Office: Morinville, Alberta.  
 Mine Manager: T. Logan.  
 Mine Surveyor: David Jones.  
 Foreman: H. Paepke.  
 Blaster: A. Logan.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 18 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 13 and 14, Sec. 36, Twp. 56, Rge. 26, W. 4th Mer.  
 Coal Mining Lease Number: 5600.  
 Truck Mine.  
 Registered Trade Name: Egg Lake Coal.

**J. B. Starky Co. Ltd.—Mine No. 1626**

Authorized Capital: \$250,000.00.  
 Name of President: J. B. Starky.  
 Names of Directors: J. B. Starky, E. A. Mills.  
 Name of Secretary-Treasurer: E. A. Mills.  
 Head Office: 10631 92 St., Edmonton, Alberta.  
 Mine Office: R.R. 2, St. Albert, Alberta.  
 General Manager: J. B. Starky.  
 Mine Manager: W. T. Worthington, Sr.  
 Mine Surveyor: W. T. Worthington, Jr.  
 Overman: J. F. Brown.  
 Firebosses: W. T. Worthington, Jr., F. Parobchuk, H. Wales, S. Kendrick.  
 Thickness of Seam: 8 ft.  
 Thickness of Cover: 75 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft and Slope. Size of Shaft: 8 ft x 12 ft. Depth of Shaft: 75 ft.  
 Size of Slope: 7 ft. x 8 ft. Depth of Slope: 210 ft.  
 Location of Mine: L.S. 4, Sec. 36, Twp. 54, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Numbers: 5537, 610,652.  
 N.A.R. and Truck Mine.  
 Registered Trade Name: Star-Key Coal.

**Carbondale Collieries Ltd.—Mine No. 1627**

Mine Office: Carbondale, Alberta.  
 General Manager: W. Dickinson.

Mine Manager: J. Kennedy.  
 Mine Surveyor: L. C. Stevens.  
 Overman: J. Kennedy.  
 Fireboss: W. Knight.  
 Thickness of Seam: 5½ ft.  
 Thickness of Cover: 60 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: S.E. ¼, Sec. 17, Twp. 55, Rge. 24, W. 4th Mer.  
 Coal Mining Lease: C.P.R.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Carbondale Coal.

**Blue Point Mine—Mine No. 1628**

Mine Office: Box 4024, S. Edmonton, Alberta.  
 General Manager: Mike Sinoski.  
 Mine Manager: S. Sinoski.  
 Mine Surveyor: L. C. Stevens.  
 Overman: S. Sinoski.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 140 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Shaft. Size of Shaft: 8 ft. x 8 ft. Depth of Shaft: 100 ft.  
 Location of Mine: L.S. 15, Sec. 23, Twp. 51, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 578.  
 Truck Mine.  
 Registered Trade Name: Blue Point Coal.

**C. F. MacLachlan—Mine No. 1632**

Mine Office: Ardrossan, Alberta.  
 General Manager: C. F. MacLachlan.  
 Mine Manager: M. Olson.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: M. Olson.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 24 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. ¼ L.S. 8 and 9, Sec. 2, Twp. 53, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: 5542.  
 Truck Mine.  
 Registered Trade Name: Beaver Hills Coal.

**Morinville Collieries Ltd.—Mine No. 1635**

Authorized Capital: \$40,000.00.  
 Name of President: John Camarta.  
 Names of Directors: J. Camarta, W. Bennett, E. Radcliffe.  
 Name of Secretary: E. Radcliffe.  
 Name of Treasurer: W. Bennett.  
 Mine Office: Morinville, Alberta.  
 Mine Manager: John Camarta.  
 Mine Surveyor: L. C. Stevens.  
 Overman: James McDonald.  
 Fireboss: James McDonald.  
 Thickness of Seam: 7 ft.  
 Thickness of Cover: 50 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft. x 7 ft. Depth of Slope: 175 ft.  
 Location of Mine: L.S. 1, Sec. 32, Twp. 55, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: 5565.  
 C.N.R., C.P.R., N.A.R. and Truck Mine.  
 Registered Trade Name: Spitfire Coal.

**J. B. St. Martin—Mine No. 1636**

Mine Office: Legal, Alberta.  
 Mine Manager: J. B. St. Martin.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: J. B. St. Martin.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 12 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 11 and 14, Sec. 26,  
     Twp. 57, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 970.  
 Truck Mine.  
 Registered Trade Name: Legal Coal.

**A. Horkulak—Mine No. 1641**

Mine Office: Box 4092, S. Edmonton, Alberta.  
 Mine Manager: A. Horkulak.  
 Mine Surveyor: L. C. Stevens.  
 Overman: A. Horkulak.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft.  
     x 7 ft. Depth of Slope: 90 ft.  
 Location of Mine: L.S. 9, 10, 15, 16, Sec. 26,  
     Twp. 51, Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: 5520, 638.  
 Truck Mine.  
 Registered Trade Name: Rabbit Hill Coal.

**T. Opalinski—Mine No. 1658**

Mine Office: Ellerslie, Alberta.  
 Mine Manager: R. Klapstein.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: R. Klapstein.  
 Thickness of Seam: 2 ft.  
 Thickness of Cover: 22 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 15, Sec. 25, Twp. 51,  
     Rge. 25, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 631, 637.  
 Truck Mine.  
 Registered Trade Name: Ellerslie Coal.

**J. G. Mucha—Mine No. 1684**

Authorized Capital: \$25,000.00.  
 Mine Office: Box 4027, S. Edmonton, Alberta.  
 Mine Manager: John Mucha.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: John Mucha.  
 Thickness of Seam: 2 ft.  
 Thickness of Cover: 12 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 10, Sec. 25, Twp. 51,  
     Rge. 25, W. 4th Mer.  
 Coal Mining Lease Numbers: C.P.R. 623, 622.  
 Truck Mine.  
 Registered Trade Name: Bright Service Coal.

**Adelard Houle—Mine No. 1696**

Mine Office: Morinville, Alberta.  
 Mine Manager: Adelard Houle.  
 Mine Surveyor: L. C. Stevens.  
 Foreman: Adelard Houle.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 16½ ft.  
 Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: L.S. 1, 2, 7 and 8, Sec. 36,  
     Twp. 56, Rge. 26, W. 4th Mer.  
 Coal Mining Lease Number: 5707.  
 Truck Mine.

Registered Trade Name: Mearn's Coal.

**GLEICHEN AREA****Blackfoot Indian Agency Coal Mine—  
Mine No. 72**

Mine Office: Gleichen, Alberta.  
 General Manager: W. P. B. Pugh.  
 Mine Manager: T. Marshall.  
 Mine Surveyor: A. G. Macaulay.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 150 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: Sec. 12, Twp. 21, Rge. 21,  
     W. 4th Mer.  
 Truck Mine.

**Hans Castella & Sons—Mine No. 1265**

Mine Office: Standard, Alberta.  
 General Manager: M. A. Castella.  
 Mine Surveyor: David Jones.  
 Overman: J. Hamilton.  
 Thickness of Seam: 3 ft. 10 in.  
 Thickness of Cover: 75 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 8 ft.  
     x 5 ft. Depth of Slope: 110 ft.  
 Location of Mine: L.S. 5, Sec. 11, Twp. 25,  
     Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 659.  
 Truck Mine.  
 Registered Trade Name: Standard Coal.

**H. Rasmussen & C. H. Fleischer—Mine  
No. 1431**

Mine Office: Rosebud, Alberta.  
 Mine Surveyor: David Jones.  
 Overman: C. H. Fleischer.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 60 to 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft.  
     x 7 ft. Depth of Slope: 30 ft.  
 Location of Mine: L.S. 3 and 6, Sec. 29, Twp.  
     26, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 704.  
 Truck Mine.  
 Registered Trade Name: Consumers Coal.

**Wm. McMillan—Mine No. 1521**

Mine Office: Rosebud, Alberta.  
 Mine Surveyor: David Jones.  
 Overman: Alex McMillan.  
 Fireboss: Charles Smith.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft.  
     x 6 ft. Depth of Slope: 140 ft.  
 Location of Mine: L.S. 14, Sec. 20, Twp. 26,  
     Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 664.  
 Truck Mine.  
 Registered Trade Name: Supreme of the Valley  
     Coal.

**HALCOURT AREA****Baldwin Collieries Ltd.—Mine No. 651**

Mine Office: Grande Prairie, Alberta.  
 Mine Manager: Ernest Cumber.  
 Mine Surveyor: David Jones.  
 Overman: Ernest Cumber.  
 Thickness of Seam: 2½ ft.  
 Thickness of Cover: 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 15, Sec. 35, Twp. 70,  
     Rge. 7, W. 6th Mer.  
 Coal Mining Lease Numbers: 2737, 5461.  
 Truck Mine.  
 Registered Trade Name: Globe Coal.

**Wm. Fraser—Mine No. 1633**

Mine Office: Halcourt, Alberta.  
 Mine Manager: Wm. Fraser.  
 Mine Surveyor: David Jones.  
 Foreman: Wm. Fraser.  
 Blaster: Wm. Fraser.  
 Thickness of Seam: 2½ ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 8, Sec. 21, Twp. 70,  
     Rge. 10, W. 6th Mer.  
 Coal Mining Lease Number: 5562.  
 Truck Mine.  
 Registered Trade Name: Fraser Coal.

**Michael Romanuik—Mine No. 1704**

Mine Office: Dawson Creek, B.C.  
 Mine Manager: Michael Romanuik.  
 Foreman: Michael Romanuik.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. and S. ½ of 3 and 6,  
     Sec. 21, Twp. 70, Rge. 10, W. 6th Mer.  
 Coal Mining Lease Number: 5831.  
 Registered Trade Name: Burn E. Z. Coal.

**HIGHWOOD AREA****Hard Coal Producers Ltd.—Mine No. 1625**

Authorized Capital: \$100,000.00.  
 Name of President: Mervyn Brown.  
 Name of Director: Robert F. McDougall.  
 Name of Secretary-Treasurer: A. Russell Clark.  
 Head Office: 304 Maclean Block, Calgary,  
     Alberta.  
 Mine Office: Turner Valley, Alberta.  
 Superintendent: Frank S. Millard.  
 Mine Manager: B. T. Brooks.  
 Overman: B. T. Brooks.  
 Fireboss: Harry Hillary.  
 Thickness of Seams: 10 ft. to 36 ft.  
 Inclination of Seam: 65 degrees.  
 Form of Opening: Tunnel.  
 Location of Mine: N.E. ¼ of Sec. 15, Twp. 19,  
     Rge. 7, W. 5th Mer.  
 Coal Mining Lease Number: C.S. 469.  
 Truck Mine.  
 Registered Trade Name: Canthracite Coal.

**Sheep River Coal—Mine No. 1638**

Authorized Capital: \$100,000.00.  
 Name of President: James E. Muir.  
 Names of Directors: James E. Muir, B. Hills,  
     S. H. Morton, W. G. Brown.  
 Name of Secretary-Treasurer: Basil Hills.

Head Office: 309 8th Avenue West, Calgary,  
     Alberta.

Mine Office: Turner Valley, Alberta.  
 General Manager: James E. Muir.  
 Mine Manager: W. G. Brown.  
 Thickness of Seam: 40 ft.  
 Thickness of Cover: 10 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 7, Sec. 24, Twp. 19,  
     Rge. 6, W. 5th Mer.  
 Coal Mining Lease Numbers: 5546, 5589.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Sheep River Coal.

**LETHBRIDGE AREA****A. Razzolini—Mine No. 56**

Mine Office: Magrath, Alberta.  
 Mine Manager: Alberta Razzolini.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Albert Razzolini.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 200 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft.  
     x 6 ft. Depth of Slope: 30 ft.  
 Location of Mine: L.S. 3, Sec. 7, Twp. 7,  
     Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: Pat. G. Russell.  
 Truck Mine.  
 Registered Trade Name: Baker Coal.

**J. A. S. Wukisich—Mine No. 738**

Head Office: 732 12 Street "C" North, Lethbridge, Alberta.  
 Mine Office: Lethbridge, Alberta.  
 Mine Manager: J. A. S. Wukisich.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: J. A. S. Wukisich.  
 Thickness of Seam: 2 ft.  
 Thickness of Cover: 20 ft. to 200 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 2 and 7, Sec. 11, Twp. 8,  
     Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: 5522.  
 Truck Mine.  
 Registered Trade Name: Santa-Maria Coal.

**Steve Kocsis & Steve Varga—Mine No. 1086**

Mine Office: Riverview Apartment, Lethbridge, Alberta.  
 Mine Manager: Steve Kocsis.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Steve Kocsis.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 20 ft. to 155 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 5 ft.  
     x 5 ft.  
 Location of Mine: L.S. 5 and 12, Sec. 8, Twp. 7,  
     Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C. 137.  
 Truck Mine.  
 Registered Trade Name: Steve's Mine.

**J. C. Chester—Mine No. 1095**

Mine Office: Lethbridge, Alberta.  
 Mine Manager: D. J. Crabb.  
 Mine Surveyor: J. F. Hamilton.  
 Firebosses: G. Chomotti, W. Strickland.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 100 ft. to 300 ft.  
 Inclination of Seam: 2 degrees.  
 Form of Opening: Slope. Size of Slope: 8 ft. x 6 ft. Depth of Slope: 136 ft.  
 Location of Mine: N.  $\frac{1}{2}$  of L.S. 8, Sec. 30, Twp. 9, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Numbers: C.P.R. 639, 660.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Royal Coal.

**Lethbridge Collieries Ltd.—Mine No. 1263**

Authorized Capital: \$1,400,000.00.  
 Name of President: Leslie Munroe.  
 Names of Directors: Leslie Munroe, E. A. Lovett, C. S. Donaldson, Wm. Toole, G. R. Whitmore.  
 Name of Secretary: C. T. Webb.  
 Name of Treasurer: R. V. Maynard.  
 Head Office: 137 9th Avenue East, Calgary, Alberta.  
 Mine Office: Shaughnessy, Alberta.  
 General Manager: J. M. Davidson.  
 Mine Manager: J. Brady.  
 Mine Surveyor: R. D. Livingstone.  
 Overman: F. Thackray.  
 Firebosses: J. Guisto, J. C. Macaulay, A. Birse, J. Yakiwazuk, J. M. Fisher, S. A. Yorko, A. Koshman.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 263 ft.  
 Inclination of Seam: Dip 2° N. 56 degrees W.  
 Form of Opening: Shaft. Size of Shaft: 9 ft. x 24 ft. Depth of Shaft: 263 ft.  
 Location of Mine: L.S. 11, Sec. 30, Twp. 10, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: M.S. 983.  
 Mine located on C.P.R.  
 Registered Trade Name: Cadillac Coal.

**Lethbridge Collieries Ltd.—Mine No. 1464**

Authorized Capital: \$1,400,000.00.  
 Name of President: Leslie Munroe.  
 Names of Directors: Leslie Munroe, E. A. Lovett, C. S. Donaldson, Wm. Toole, G. R. Whitmore.  
 Name of Secretary: C. T. Webb.  
 Name of Treasurer: R. V. Maynard.  
 Head Office: 137 9th Avenue East, Calgary, Alberta.  
 Mine Office: Lethbridge, Alberta.  
 General Manager: J. M. Davidson.  
 Mine Manager: A. G. Donaldson.  
 Mine Surveyor: R. D. Livingstone.  
 Overman: H. Tyrer.  
 Firebosses: D. Coutts, G. Coutts, J. Peta, J. Stewart, R. Dobson, L. C. Ridgeway, A. McColl.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 400 ft.  
 Inclination of Seam: 1 in  $75^{\circ}$ , N. 8 W.  
 Form of Opening: Shaft. Size of Shaft: 11 ft. x 19 ft. Depth of Shaft: 359 ft.

Location of Mine: L.S. 3, Sec. 2, Twp. 9, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 524.  
 Mine located on C.P.R.  
 Registered Trade Name: Galt Coal.

**J. J. Hamilton Coal Co.—Mine No. 1581**

Authorized Capital: \$22,000.00.  
 Head Office: 413 8th Street South, Lethbridge, Alberta.  
 Mine Office: Lethbridge, Alberta.  
 Mine Manager: J. J. Hamilton.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: E. Tyrer.  
 Firebosses: D. Howell, S. Lesson.  
 Thickness of Seam: 4 ft. 3 in.  
 Thickness of Cover: 470 ft.  
 Inclination of Seam: 2 degrees.  
 Form of Opening: Shaft. Size of Shaft: 8 ft. x 9 ft. Depth of Shaft: 235 ft.  
 Location of Mine: L.S. 5, 6, 10, 12 and 15 Sec. 24, Twp. 9, Rge. 22, W. 4th Mer.  
 Coal Mining Lease Number: 5370.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Federal Coal.

**L. C. McClain, Bly & Conrad—Mine No. 1685**

Mine Office: Magrath, Alberta.  
 Mine Manager: Dale Bly.  
 Foreman: Dale Bly.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 22 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sec. 18, Twp. 7, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: Indian Reserve.  
 Truck Mine.  
 Registered Trade Name: M. & M. Coal.

**MILK RIVER AREA****Thomas Taylor—Mine No. 1301**

Mine Office: Lucky Strike, Alberta.  
 Mine Manager: Edward Taylor.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Edward Taylor.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 86 ft.  
 Form of Opening: Slope. Size of Slope: 6½ ft. x 5½ ft. Depth of Slope: 221 ft.  
 Location of Mine: L.S. 7, 8, 9, 10, Sec. 10, Twp. 3, Rge. 11, W. 4th Mer.  
 Truck Mine.  
 Registered Trade Name: New Benwell Coal.

**MORLEY AREA****B. Ainsley & Sons—Mine No. 1619**

Mine Office: Morley, Alberta.  
 Mine Surveyor: Gordon L. Kidd.  
 Overman: G. Ainsley.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 75 ft.  
 Inclination of Seam: 25° S.W.  
 Form of Opening: Slope. Size of Slope: 7 ft. x 7 ft. Depth of Slope: 200 ft.

## THE MINES DIVISION

Location of Mine: Unsurveyed Territory.  
C.P.R. and Truck Mine.  
Coal Mining Lease Number: H.O. 5.  
Registered Trade Name: Fire Cloud Coal.

## MOUNTAIN PARK AREA

**Mountain Park Coals Ltd.—Mine No. 282**  
Authorized Capital: \$1,042,430.00.  
Name of President: Alec M. Mitchell.  
Names of Directors: A. M. Mitchell, Col. Sir Harold Mitchell, Mayne Reid, T. Dickinson, A. C. Dunn.  
Name of Secretary-Treasurer: Robert M. Jenkinson.  
Head Office: 410 Tegler Building, Edmonton, Alberta.  
Mine Office: Mountain Park, Alberta.  
General Manager: Fred Horne.  
Mine Manager: Don F. MacKinnon.  
Foremen: Robert Norton, A. Emblau, A. Stene, A. Wright.  
Thickness of Seam: 28 ft.  
Thickness of Cover: 250 ft. to 800 ft.  
Inclination of Seam: 38 to 40 degrees.  
Form of Opening: Strip Mine.  
Location of Mine: Sec. 33, Twp. 45, Rge. 23, W. 5th Mer.  
Coal Mining Lease Numbers: 5043, 5050.  
Mine located on C.N.R.  
Registered Trade Name: Mountain Park Coal.

**Cadomin Coal Co. Ltd.—Mine No. 693**  
Authorized Capital: \$1,200,000.00.  
Name of President: H. R. Milner.  
Names of Directors: A. C. Emery, S. W. Field, T. M. Burnett, H. Riley, C. Campbell.  
Name of Secretary-Treasurer: C. Chisholm.  
Head Office: 418 McLeod Building, Edmonton, Alberta.  
Mine Office: Cadomin, Alberta.  
General Manager: D. B. Young.  
Mine Manager: P. S. Douglas.  
Mine Surveyor: T. O. Neumann.  
Overman: A. J. Henderson.  
Firebosses: J. Williamson, W. Driega, P. Nicholson, S. Chesney, S. Wilson, H. Mc-Kenna, J. James.  
Thickness of Seam: 33 ft.  
Thickness of Cover: 50 ft.  
Inclination of Seam: 60 degrees.  
Form of Opening: Shaft and Slope. Size of Shaft: 20 ft. x 12 ft. Depth of Shaft: 826 ft. Size of Slope: 10 ft. x 10 ft. Depth of Slope: 1,200 ft.  
Location of Mine: L.S. 14, Sec. 31, Twp. 46, Rge. 23, W. 5th Mer.  
Coal Mining Lease Numbers: 5061, 5082.  
Mine located on C.N.R.  
Registered Trade Name: Cadomin Coal.

**Luscar Coals Ltd.—Mine No. 905**

Authorized Capital: \$650,000.00.  
Name of President: Alex M. Mitchell.  
Names of Directors: A. M. Mitchell, Col. Sir Harold Mitchell, Mayne Reid, R. Dickinson, A. C. Dunn.  
Name of Secretary-Treasurer: Robert M. Jenkinson.

Head Office: 410 Tegler Building, Edmonton, Alberta.  
Mine Office: Luscar, Alberta.  
General Manager: Fred L. Horne.  
Mine Manager: Duncan C. Hamilton.  
Mine Surveyor: Norman S. Clyburn.  
Overman: William J. Thomas, John J. Kubin, Robert A. Mitchell.  
Firebosses: John R. Brown, Jenkin Jones, Richard Davies, Roderick McLeod, William Hughes, Richard Brown.  
Thickness of Seam: 30 ft.  
Thickness of Cover: 10 ft. to 150 ft.  
Inclination of Seam: 0 to 90 degrees.  
Form of Opening: Tunnel.  
Location of Mine: L.S. 7, Sec. 23, Twp. 47, Rge. 24, W. 5th Mer.  
Coal Mining Lease Number: 5213.  
Mine located on C.N.R.  
Registered Trade Name: Luscar Coal.

**Gregg River Collieries—Mine No. 1392**

Authorized Capital: \$55,000.00.  
Name of President: H. R. Milner.  
Names of Directors: A. C. Emery, S. W. Field, T. M. Burnett, C. Campbell, H. Riley.  
Name of Secretary-Treasurer: C. Chisholm.  
Head Office: Edmonton, Alberta.  
Mine Office: Cadomin, Alberta.  
General Manager: D. B. Young.  
Mine Manager: Roy Carr.  
Mine Surveyor: T. O. Neumann.  
Firebosses: J. Denholm, I. McLaren.  
Thickness of Seam: 40 ft.  
Thickness of Cover: 25 ft.  
Inclination of Seam: 40 degrees.  
Form of Opening: Horizontal.  
Location of Mine: L.S. 8, Sec. 28, Twp. 47, Rge. 24, W. 5th Mer.  
Coal Mining Lease Number: 5560.  
Mine located on C.N.R.  
Registered Trade Name: Gregg River Coal.

**Luscar Coals Ltd.—Mine No. 1617**

Mine Office: Luscar, Alberta.  
Mine Manager: D. C. Hamilton.  
Mine Surveyor: N. Clyburn.  
Overman: W. Thomas.  
Firebosses: R. Mitchell, E. Gitzel.  
Thickness of Seam: 33 ft.  
Location of Mine: Sec. 27, Twp. 47, Rge. 24, W. 5th Mer.  
Coal Mining Lease Number: 5440.  
Registered Trade Name: Luscar Coal.

## NORDEGG AREA

**Brazeau Collieries Ltd.—Mine No. 256**

Authorized Capital: \$4,000,000.00.  
Name of President: J. A. Boyd.  
Names of Directors: J. A. Boyd, W. H. Moore, H. S. Gausby, J. A. Kilpatrick, G. R. Cottrell.  
Name of Secretary-Treasurer: H. S. Gausby.  
Head Office: 25 King Street West, Toronto 1, Ontario.  
Mine Office: Nordegg, Alberta.  
General Manager: A. D. Sturrock.  
Mine Manager: D. Shanks.  
Overman: T. B. Touhey.

Firebosses: J. S. Barton, J. Henderson, R. Whyte, O. Edwards, G. B. Minue, A. Blasetti.

Thickness of Seam: 6 ft.

Thickness of Cover: 293 ft.

Inclination of Seam: 12 degrees.

Form of Opening: Slope. Size of Slope: 13 ft. x 12 ft. Depth of Slope: 4,000 ft.

Location of Mine: Twp. 40, Rge. 15, W. 5th Mer.

Coal Mining Lease Number: 5169.

Mine located on C.N.R.

Registered Trade Name: Brazeau Bituminous Steam Coal.

#### Brazeau Collieries Ltd.—Mine No. 1585

Authorized Capital: \$4,000,000.00.

Name of President: J. A. Boyd.

Names of Directors: J. A. Boyd, W. H. Moore, H. S. Gausby, J. A. Kilpatrick, G. R. Cottrell.

Name of Secretary-Treasurer: H. S. Gausby.

Head Office: 25 King Street West, Toronto 1, Ontario.

Mine Office: Nordegg, Alberta.

General Manager: A. D. Sturrock.

Mine Manager: A. McMullen.

Overman: D. Duncan.

Firebosses: J. B. White, J. White, H. Williams.

Thickness of Seam: 13 ft.

Thickness of Cover: 314 ft.

Inclination of Seam: 12 degrees.

Form of Opening: Slope. Size of Slope: 12 ft. x 6 ft. Depth of Slope: 4,000 ft.

Location of Mine: Twp. 40, Rge. 15, W. 5th Mer.

Coal Mining Lease Number: 5169.

Mine located on C.N.R.

Registered Trade Name: Brazeau Bituminous Steam Coal.

#### PAKOWKI AREA

##### M. R. Johnson & E. Davis—Mine No. 1318

Mine Office: Elkwater, Alberta.

Mine Manager: M. R. Johnson.

Mine Surveyor: E. Ashburner.

Overman: M. R. Johnson.

Thickness of Seam: 5 ft. 7 in.

Thickness of Cover: 0 to 200 ft.

Inclination of Seam: Horizontal.

Location of Mine: L.S. 10, Sec. 23, Twp. 8, Rge. 3, W. 4th Mer.

Coal Mining Lease Number: 2890.

Truck Mine.

Registered Trade Name: Elkwater Coal.

#### PEKISKO AREA

##### G. C. Davies—Mine No. 1516

Mine Office: Priddis, Alberta.

Mine Surveyor: L. C. Stevens.

Overman: G. C. Davies.

Fireboss: Thomas Coulter.

Thickness of Seam: 3 ft. 9 in.

Thickness of Cover: 125 ft.

Inclination of Seam: 12 degrees.

Form of Opening: Slope. Size of Slope: 6 ft. x 7 ft. Depth of Slope: 190 ft.

Location of Mine: L.S. 10, Sec. 4, Twp. 22, Rge. 3, W. 5th Mer.

Coal Mining Lease Number: 5614.

Truck Mine.

Registered Trade Name: O. V. Coal.

#### PEMBINA AREA

##### Alberta Coal Co. Ltd.—Mine No. 419

Name of President: Fred Mannix, Jr.

Names of Directors: Fred Mannix, Jr., J. T. Sangwin, Eric Connelly, J. B. Bonny, E. W. Costello.

Name of Secretary: J. T. Sangwin.

Name of Treasurer: Eric Connelly.

Head Office: 21 Credit Foncier Building, Edmonton, Alberta.

Mine Office: Wabamun, Alberta.

General Manager: J. T. Sangwin.

Mine Manager: John Vivyrka.

Mine Surveyor: Wm. Blackstock.

Thickness of Seam: 8½ ft.

Thickness of Cover: 25 ft. to 50 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: L.S. 16, Sec. 9, Twp. 53, Rge. 4, W. 5th Mer.

Coal Mining Lease Numbers: C.P.R. 572, 663.

Mine located on C.N.R.

Registered Trade Name: Victory Coal.

#### Gainford Collieries—Mine No. 1409

Mine Office: Seba Beach, Alberta.

Mine Manager: Robert Lardner.

Foreman: Robert Lardner.

Thickness of Seam: 9 ft.

Thickness of Cover: 20 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: S.E. ¼ of Sec. 36, Twp. 53, Rge. 6, W. 5th Mer.

Coal Mining Lease Numbers: C.P.R. 618, 5099.

Registered Trade Name: Gain-Heat Coal.

#### Pembina Peerless Coal Co. Ltd.—Mine No. 1495

Mine Office: Entwistle, Alberta.

Mine Manager: Gordon Ostertag.

Mine Surveyor: L. C. Stevens.

Foreman: Gordon Ostertag.

Thickness of Seam: 4 ft.

Thickness of Cover: 24 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: S.W. ¼ of Sec. 34, Twp. 53, Rge. 7, W. 5th Mer.

Coal Mining Lease Number: C.S. 238.

Truck Mine.

Registered Trade Name: Pembina Peerless Coal.

#### H. C. Lang & R. F. Forbes—Mine No. 1592

Authorized Capital: \$30,000.00.

Mine Office: Seba Beach, Alberta.

General Manager: H. C. Lang.

Mine Manager: Robert F. Forbes.

Mine Surveyor: Walter Jewett.

Foreman: Robert F. Forbes.

Blaster: Fred Crud.

Thickness of Seam: 27 ft.

Thickness of Cover: 15 ft.

Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: E.  $\frac{1}{2}$  of Sec. 30, Twp. 52,  
     Rge. 4, W. 5th Mer.  
 Coal Mining Lease Number: 5442.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Pembina Royal Coal.

**Strawberry Creek Coal Co.—Mine No. 1644**

Authorized Capital: \$20,000.00.  
 Name of President: L. G. Karsay.  
 Names of Directors: L. G. Karsay, Joe Balga.  
 Name of Secretary: William Fodor.  
 Mine Office: Warburg, Alberta.  
 Mine Manager: Frank Fodor.  
 Mine Surveyor: David Jones.  
 Foreman: Frank Fodor.  
 Blaster: Frank Fodor.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 15 ft. to 25 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 16 of Sec. 13, Twp. 49,  
     Rge. 3, W. 5th Mer.  
 Coal Mining Lease Number: C.P.R. 617.  
 Truck Mine.  
 Registered Trade Name: Strawberry Creek  
     Coal.

**Lothian Collieries Ltd.—Mine No. 1645**

Authorized Capital: \$32,500.00.  
 Name of President: A. N. Scott.  
 Names of Directors: W. Foster, A. N. Scott,  
     A. Scott, G. Finlay.  
 Name of Secretary-Treasurer: G. Finlay.  
 Head Office: 9551 102 Avenue, Edmonton,  
     Alberta.  
 Mine Office: Wabamun, Alberta.  
 Mine Manager: William Foster.  
 Mine Surveyor: William Foster.  
 Foreman: William Foster.  
 Thickness of Seam: 14 ft.  
 Thickness of Cover: 22 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sec. 10 and 15, Twp. 53,  
     Rge. 4, W. 5th Mer.  
 Coal Mining Lease Numbers: C.P.R. 628,  
     5568.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Blue Flame Coal.

**N. Fry & T. Larson—Mine No. 1652**

Mine Office: Seba Beach, Alberta.  
 Mine Manager: N. Fry.  
 Mine Surveyor: David Jones.  
 Overman: N. Fry.  
 Thickness of Seam: 9 ft.  
 Thickness of Cover: 35 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 6 ft.  
     x 6 ft. Depth of Slope: 86 ft.  
 Location of Mine: L.S. 16, Sec. 25, Twp. 53,  
     Rge. 6, W. 5th Mer.  
 Coal Mining Lease Number: C.P.R. 608.  
 Registered Trade Name: Cora Coal.

**J. Lidgett & L. Opheim—Mine No. 1657**

Mine Office: Entwistle, Alberta.  
 Mine Manager: Louis T. Opheim.  
 Mine Surveyor: L. C. Stevens.  
 Overman: Louis T. Opheim.  
 Thickness of Seam: 4½ ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: S.  $\frac{1}{2}$  of 16 and 9, Sec. 10,  
     Twp. 54, Rge. 7, W. 5th Mer.  
 Coal Mining Lease Number: 5619.  
 Truck Mine.  
 Registered Trade Name: O. & L. Coal.

**Lothian Collieries Ltd.—Mine No. 1670**

Authorized Capital: \$75,000.00.  
 Name of President: A. N. Scott.  
 Names of Directors: Wm. Foster, A. N. Scott.  
 Name of Secretary-Treasurer: G. W. Finlay.  
 Head Office: 9553 102 Avenue, Edmonton,  
     Alberta.  
 Mine Office: Warburg, Alberta.  
 General Manager: W. Foster.  
 Mine Manager: Joseph Pinter.  
 Mine Surveyor: Wm. Foster.  
 Foreman: Joseph Pinter.  
 Thickness of Seam: 2½ ft.  
 Thickness of Cover: 12 ft. to 15 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 14, Sec. 13, Twp. 49,  
     Rge. 3, W. 5th Mer.  
 Coal Mining Lease Numbers: C.P.R. 656, 688.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Pinter Coal.

**Continental Collieries Ltd.—Mine No. 1683**

Mine Office: Seba Beach, Alberta.  
 President: C. M. Munson.  
 Vice-President: W. F. Stevenson.  
 Name of Secretary: E. W. Roberts.  
 Thickness of Seam: 17 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 5, Sec. 33, Twp. 52,  
     Rge. 5, W. 5th Mer.  
 Coal Mining Lease Numbers: C.P.R. 667, 684.  
 Truck Mine.  
 Registered Trade Name: Sunburst Coal.

**James Sturms—Mine No. 1687**

Mine Office: Genesee, Alberta.  
 Mine Manager: James Sturms.  
 Foreman: James Sturms.  
 Form of Opening: Strip Mine.  
 Location of Mine: N.E.  $\frac{1}{4}$  of 9, 10, 16, Sec. 15,  
     Twp. 50, Rge. 4, W. 5th Mer.  
 Coal Mining Lease Number: C.P.R. 654.  
 Registered Trade Name: Island View Coal.

**Karl Schon & M. J. Hoover—Mine No. 1699**

Mine Office: Edmonton, Alberta.  
 Mine Manager: John Lang.  
 Mine Surveyor: David Jones.  
 Foreman: John Lang.  
 Thickness of Seam: 9 ft.  
 Thickness of Cover: 35 ft.

Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 4, 5, 6, 11 and 12,  
   Sec. 8, Twp. 50, Rge. 6, W. 5th Mer.  
 Coal Mining Lease Number: 5700.  
 Registered Trade Name: Tomahawk Coal.

**Ralph S. Gailey & Sons—Mine No. 1701**  
 Mine Office: St. Francis, Alberta.  
 Mine Manager: R. Gailey.  
 Foreman: R. Gailey.  
 Thickness of Seam: 18 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: N.W.  $\frac{1}{4}$  of Sec. 18, Twp. 50,  
   Rge. 3, W. 5th Mer.  
 Coal Mining Lease Number: 5770.  
 Registered Trade Name: Gailey Coal.

**Edmund Miller—Mine No. 1709**  
 Mine Office: Telfordville, Alberta.  
 Location of Mine: L.S. 12 and 13, Sec. 33,  
   Twp. 49, Rge. 2, W. 5th Mer.  
 Coal Mining Lease Number: C.P.R. 699.  
 Registered Trade Name: Miller Coal.

#### PINCHER AREA

**Rhodes Mining Co.—Mine No. 1440**  
 Mine Office: Lundbreck, Alberta.  
 Mine Manager: W. B. Rhodes.  
 Mine Surveyor: L. Dwarkin.  
 Overman: W. B. Rhodes.  
 Thickness of Seam: 6 ft. to 8 ft.  
 Thickness of Cover: Outcrop.  
 Inclination of Seam: 70 degrees.  
 Form of Opening: Slope. Size of Slope: 7 ft.  
   x 8 ft. Depth of Slope: 96 ft.  
 Location of Mine: L.S. 10, Sec. 26, Twp. 7,  
   Rge. 2, W. 5th Mer.  
 Coal Mining Lease Number: Freehold.  
 Truck Mine.  
 Registered Trade Name: Quick Flame Coal.

#### PRAIRIE CREEK AREA

**Hinton Hard Coal Co.—Mine No. 1653**  
 Authorized Capital: \$10,000.00.  
 Mine Office: Hinton, Alberta.  
 Mine Manager: George Sharpe.  
 Mine Surveyor: L. C. Stevens.  
 Overman: George Sharpe.  
 Thickness of Seam: 15 ft.  
 Thickness of Cover: 100 ft.  
 Inclination of Seam: 15 degrees.  
 Form of Opening: Slope. Size of Slope: 9 ft.  
   x 9 ft. Depth of Slope: 285 ft.  
 Location of Mine: L.S. 4, Sec. 29, Twp. 50,  
   Rge. 25, W. 5th Mer.  
 Truck Mine.  
 Registered Trade Name: Hinton Hard Coal.

**J. Capostinsky & C. M. Woodley—Mine No. 1706**  
 Mine Office: Hinton, Alberta.  
 Mine Manager: Clifford M. Woodley.  
 Location of Mine: Twp. 50, Rge. 24, W. 5th  
   Mer.  
 Coal Mining Lease Number: 5861.  
 Registered Trade Name: Capwood Coal.

#### REDCLIFF AREA

##### Naco Coal Co.—Mine No. 772

Mine Office: Medicine Hat, Alberta.  
 Mine Manager: C. R. Cooke.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: C. R. Cooke.  
 Thickness of Seam: 7½ ft.  
 Thickness of Cover: 235 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit. Size of Slope: 6 ft.  
   x 8 ft. Depth of Slope: 135 ft.  
 Location of Mine: L. S. 2, Sec. 5, Twp. 13,  
   Rge. 6, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R.  
   C.P.R. and Truck Mine.  
 Registered Trade Name: Ajax Coal.

##### G. A. Naylor—Mine No. 1707

Mine Office: Medicine Hat, Alberta.  
 Mine Manager: G. A. Naylor.  
 Mine Surveyor: George McMillan.  
 Foreman: G. A. Naylor.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sec. 1, Twp. 13, Rge. 7,  
   W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 697.  
 Registered Trade Name: Hatax Coal.

#### ROCHESTER AREA

##### M. S. Alexander—Mine No. 1686

Mine Office: Athabasca, Alberta.  
 Mine Manager: Marwood Alexander.  
 Foreman: Marwood Alexander.  
 Thickness of Seam: 4 ft. to 14 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 8, Sec. 11, Twp. 66,  
   Rge. 24, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 555.  
 Truck Mine.  
 Registered Trade Name: Baptiste Coal.

#### SAUNDERS AREA

**Bighorn & Saunders Creek Collieries—  
 Mine No. 388**  
 Authorized Capital: \$300,000.00.  
 Name of President: Raoul Green.  
 Name of Directors: L. P. Robert, W. G. Pearson,  
   W. Bird, Dean Harrington.  
 Name of Secretary-Treasurer: A. R. Granger.  
 Head Office: Blairmore, Alberta.  
 Mine Office: Saunders, Alberta.  
 Mine Manager: Owen Morgan.  
 Mine Surveyor: Owen Morgan.  
 Overman: L. C. Gladwin.  
 Firebosses: R. Cowley, John Nelson, Frank Rich.  
 Thickness of Seam: 4 ft. 9 in.  
 Thickness of Cover: 300 ft.  
 Inclination of Seam: 7 degrees.  
 Form of Opening: Slope. Size of Slope: 8 ft.  
   x 6 ft. Depth of Slope: 2,200 ft.  
 Location of Mine: Sec. 24, Twp. 40, Rge. 13,  
   W. 5th Mer.  
 Coal Mining Lease Number: 5162.  
 Mine located on C.N.R.  
 Registered Trade Name: Bighorn and Saunders  
   Creek Coal.

**Alexo Coal Co. Ltd.—Mine No. 852**

Authorized Capital: \$200,000.00.  
 Name of President: E. F. Pullen.  
 Name of Directors: E. F. Pullen, F. Pullen,  
     P. F. Pullen, C. C. Clark, G. S. Robertson.  
 Name of Secretary-Treasurer: C. C. Clark.  
 Head Office: Toronto, Ontario.  
 Mine Office: Alexo, Alberta.  
 General Manager: G. S. Robertson.  
 Mine Manager: R. Tennant.  
 Mine Surveyor: P. F. Pullen.  
 Overman: J. Parker.  
 Firebosses: R. Kerr, J. Smillie, P. F. Pullen,  
     R. Ginter.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 270 ft.  
 Inclination of Slope: 7 degrees.  
 Form of Opening: Slope. Size of Slope: 8 ft.  
     x 12 ft. Depth of Slope: 2,900 ft.  
 Location of Mine: N.W.  $\frac{1}{4}$  L.S. 9, Sec. 27,  
     Twp. 40, Rge. 13, W. 5th Mer.  
 Coal Mining Lease Numbers: 5390, 5405, 5661.  
 Mine located on C.N.R.  
 Registered Trade Name: Alexo and Acorn  
     Coal.

**SHEERNESS AREA**

**Chinook Coal Co. Ltd.—Mine No. 443**  
 Authorized Capital: \$50,000.00.  
 Name of President: Claude Gallinger.  
 Names of Directors: C. Gallinger, Mrs. R. L.  
     Wood, R. L. Wood, Mrs. Jean Gallinger,  
     Wilber Gallinger.  
 Name of Secretary-Treasurer: R. L. Wood.  
 Mine Office: Sheerness, Alberta.  
 Mine Manager: R. L. Wood.  
 Mine Surveyor: David Jones.  
 Foremen: F. Heaston, H. E. Walker.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 15 ft. to 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1, Sec. 12, Twp. 29,  
     Rge. 13, W. 4th Mer.  
 Coal Mining Lease Numbers: 5183, C.P.R.  
     434, 559.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Sheerness Chinook  
     Coal.

**Litke Brothers—Mine No. 486**

Mine Office: Hanna, Alberta.  
 Mine Manager: Mike Litke.  
 Mine Surveyor: David Jones.  
 Foreman: Mike Litke.  
 Thickness of Seam: 3½ ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: S.W.  $\frac{1}{4}$  of L.S. 6, Sec. 20,  
     Twp. 32, Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 199.  
 Truck Mine.  
 Registered Trade Name: Superior Coal.

**John Gaetz—Mine No. 1314**

Mine Office: Hanna, Alberta.  
 Mine Manager: John Gaetz.  
 Mine Surveyor: David Jones.  
 Foreman: John Gaetz.  
 Thickness of Seam: 2½ ft.

Thickness of Cover: 10 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1, Sec. 6, Twp. 29,  
     Rge. 14, W. 4th Mer.  
 Coal Mining Lease Numbers: 2840, 5591.  
 Truck Mine.  
 Registered Trade Name: Gowan Coulee Coal

**T. G. Ironside & A. Glover—Mine No. 1398**

Mine Office: Scapa, Alberta.  
 Mine Manager: T. G. Ironside.  
 Mine Surveyor: David Jones.  
 Foreman: T. G. Ironside.  
 Thickness of Seam: 3 ft.  
 Thickness of Cover: 12 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 12, Sec. 5, Twp. 34,  
     Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 468A.  
 Registered Trade Name: Ironside Coal.

**Fred Pahl—Mine No. 1401**

Mine Office: Hanna, Alberta.  
 Mine Manager: A. Pahl.  
 Mine Surveyor: David Jones.  
 Foreman: A. Pahl.  
 Thickness of Seam: 3½ ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: E. & W.  $\frac{1}{2}$  of L.S. 7 & 8,  
     Sec. 30, Twp. 32, Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: 5083.  
 Truck Mine.  
 Registered Trade Name: Eureka Coal.

**Sheerness Coal Co. Ltd.—Mine No. 1432**

Authorized Capital: \$10,000.00.  
 Name of President: Claude Gallinger.  
 Names of Directors: Claude Gallinger, Mrs.  
     Jean Gallinger.  
 Name of Secretary-Treasurer: R. L. Wood.  
 Mine Office: Sheerness, Alberta.  
 Mine Manager: R. L. Wood.  
 Mine Surveyor: David Jones.  
 Foremen: Bert H. Bishop, H. Sward.  
 Thickness of Seam: 4½ ft. to 5 ft.  
 Thickness of Cover: 15 ft. to 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 5, Sec. 19, Twp. 29,  
     Rge. 12, W. 4th Mer.  
 Coal Mining Lease Numbers: 5027, 5135.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Sheebo Coal.

**J. Masciangelo & Partners—Mine No. 1553**

Mine Office: Delia, Alberta.  
 Mine Manager: John Masciangelo.  
 Mine Surveyor: David Jones.  
 Overman: John Masciangelo.  
 Thickness of Seam: 3 ft. 9 in.  
 Thickness of Cover: 30 ft. to 60 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.

Location of Mine: L.S. 9, 10, 15 and 16, Sec. 21, Twp. 30, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: 5368.  
 Registered Trade Name: Blossom Mine Coal.

**Crystal Mine—Mine No. 1597**

Mine Office: Hanna, Alberta.  
 Mine Manager: A. J. Bordula.  
 Mine Surveyor: David Jones.  
 Foreman: A. J. Bordula.  
 Thickness of Seam: 7½ ft.  
 Thickness of Cover: 16 ft.  
 Inclination of Seam: Horizontal.  
 Location of Mine: L.S. 16, Sec. 12, Twp. 29, Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: 5289.  
 Truck Mine.  
 Registered Trade Name: Crystal Coal.

**J. I. Stirling & W. J. Friedley—Mine No. 1699**

Mine Office: Delia, Alberta.  
 Mine Manager: J. I. Stirling.  
 Foreman: J. I. Stirling.  
 Thickness of Seam: 3 ft. 9 in.  
 Thickness of Cover: 15 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: S.W. ¼ of Sec. 21, Twp. 30, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: 5827.  
 Truck Mine.  
 Registered Trade Name: Handhills Coal.

**TABER AREA****J. Annon & Popel—Mine No. 672**

Mine Office: Winnifred, Alberta.  
 Mine Manager: Wm. Annon.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Wm. Annon.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 170 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: L.S. 3, Sec. 27, Twp. 12, Rge. 10, W. 4th Mer.  
 Coal Mining Lease Numbers: C.P.R. 9, 5353.  
 Truck Mine.  
 Registered Trade Name: Leland Coal.

**D. McCracken & Goering—Mine No. 838**

Mine Office: Alderson, Alberta.  
 Mine Manager: Duncan McCracken.  
 Overman: Duncan McCracken.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 160 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 7, Sec. 28, Twp. 12, Rge. 10, W. 4th Mer.  
 Coal Mining Lease Number: 5203.  
 Truck Mine.  
 Registered Trade Name: Sunny South Coal.

**Continental Coal Corporation Ltd.—Mine No. 1334**

Authorized Capital: \$2,000,000.00.  
 Name of President: Victor W. Campbell.

Names of Directors: Victor W. Campbell, Walter Schlosser, W. Dubois.  
 Name of Secretary-Treasurer: D. S. Williamson.  
 Mine Office: Grassy Lake, Alberta.  
 Mine Manager: Victor W. Campbell.  
 Mine Surveyor: J. F. Hamilton.  
 Foreman: W. Turnbull.  
 Thickness of Seam: 2 ft. 8 in.  
 Thickness of Cover: 21 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1, 7 and 8, Sec. 26, Twp. 9, Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C. 124.  
 Mine located on C.P.R.  
 Registered Trade Name: Alburna Coal.

**Oliver Coal Mines—Mine No. 1536**

Mine Office: Taber, Alberta.  
 Mine Manager: Lewis Oliver.  
 Mine Surveyor: J. F. Hamilton.  
 Overman: Evan Evans.  
 Thickness of Seam: 3 ft. 9 in.  
 Thickness of Cover: 90 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: L.S. 2, Sec. 18, Twp. 10, Rge. 16, W. 4th Mer.  
 Coal Mining Lease Numbers: M.S. 438, 462.  
 Truck Mine.  
 Registered Trade Name: Oliver Senior Coal.

**Southalta Coal Co.—Mine No. 1604**

Authorized Capital: \$70,000.00.  
 Name of President: M. M. McDonald.  
 Name of Director: C. C. Cook.  
 Mine Office: Taber, Alberta.  
 General Manager: C. C. Cook.  
 Mine Manager: M. G. Rhynas.  
 Mine Surveyor: M. G. Rhynas.  
 Foreman: George Warner.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 36 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sec. 12, Twp. 10, Rge. 17, W. 4th Mer.  
 Coal Mining Lease Numbers: M.S. 433, 555.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Southalta Coal.

**J. P. Neufeld—Mine No. 1705**

Mine Office: Grassy Lake, Alberta.  
 Mine Manager: J. P. Neufeld.  
 Mine Surveyor: J. F. Hamilton.  
 Foreman: R. E. Galvin.  
 Thickness of Seam: 2½ ft.  
 Thickness of Cover: 25 ft. to 40 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. and S. ½ of L.S. 4 and 5, Sec. 25, Twp. 9, Rge. 13, W. 4th Mer.  
 Coal Mining Lease Number: S.L. 545.  
 C.P.R. and Truck Mine.  
 Registered Trade Name: Neucoal Mines.

**SLAVE AREA****Rybert Pearson—Mine No. 1682**

Mine Office: Canyon Creek, Alberta.  
 Mine Manager: Rybert Pearson.  
 Foreman: Rybert Pearson.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 12 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: Sec. 21 and 22, Twp. 73,  
     Rge. 8, W. 5th Mer.  
 Coal Mining Lease Number: 5705.  
 Truck Mine.  
 Registered Trade Name: Noralta Coal.

**TOFIELD AREA****Emil Skarin—Mine No. 215**

Head Office: 11115 89 Avenue, Edmonton,  
     Alberta.  
 Mine Office: Dodds, Alberta.  
 General Manager: Emil Skarin.  
 Mine Manager: Arnold Chappell.  
 Mine Surveyor: David Jones.  
 Foreman: George Foss.  
 Blaster: George Foss.  
 Thickness of Seam: 7 ft.  
 Thickness of Cover: 12 ft. to 22 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 7, Sec. 14, Twp. 49,  
     Rge. 18, W. 4th Mer.  
 Coal Mining Lease Number: 5544.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: North Star Coal.

**Tofield Coal Co. Ltd.—Mine No. 252**

Authorized Capital: \$100,000.00.  
 Name of President: Claude Gallinger.  
 Names of Directors: Claude Gallinger, Mrs.  
     Jean Gallinger.  
 Name of Secretary-Treasurer: Wilbur Gallinger  
 Mine Office: Tofield, Alberta.  
 General Manager: Claude Gallinger.  
 Mine Manager: Norman E. Scott.  
 Mine Surveyor: David Jones.  
 Blaster: Anton Johnson.  
 Thickness of Seam: 6 ft.  
 Thickness of Cover: 20 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. ½ of Sec. 26, Twp. 50,  
     Rge. 19, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C.  
 C.N.R. and Truck Mine.  
 Registered Trade Name: Headlight Coal.

**Black Nugget Coal Co. Ltd.—Mine No. 1107**

Authorized Capital: \$70,000.00.  
 Name of President: Frederick L. Irving.  
 Names of Directors: F. L. Irving, D. F. Irving,  
     Charles Ellis.  
 Name of Secretary-Treasurer: S. H. Roe.  
 Head Office: 604 McLean Block, Calgary,  
     Alberta.

Mine Office: Dodds, Alberta.  
 General Manager: F. L. Irving.  
 Mine Manager: D. F. Irving.  
 Mine Surveyor: David Jones.  
 Foremen: W. B. Mainland, F. Kinerski.  
 Blaster N. Pooke.

Thickness of Seam: 5½ ft.

Thickness of Cover: 21 ft.

Inclination of Seam: Horizontal.

Form of Opening: Strip Mine.

Location of Mine: L.S. 15, Sec. 11, Twp. 49,  
     Rge. 18, W. 4th Mer.

Coal Mining Lease Number: S.L. 262.

C.N.R. and Truck Mine.

Registered Trade Name: Hi-Lo Coal.

**Ryley Coal Co.—Mine No. 1206**

Name of President: Mike Zacharchuk.  
 Names of Directors: Mike Zacharchuk, John  
     Pozniak, Harry Rudyk.  
 Name of Secretary-Treasurer: Stella Zachar-  
     chuk.  
 Mine Office: Ryley, Alberta.  
 Mine Manager: Mike Zacharchuk.  
 Mine Surveyor: David Jones.  
 Overman: Mike Zacharchuk.  
 Thickness of Seam: 12 ft.  
 Thickness of Cover: 12 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 8 ft.  
     Depth of Slope: 60 ft.  
 Location of Mine: L.S. 1 and 8, Sec. 8, Twp. 49,  
     Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: H.B.C. 125.  
 Truck Mine.  
 Registered Trade Name: Ryley Coal.

**C. Binder—Mine No. 1624**

Authorized Capital: \$10,000.00.  
 Mine Office: Ryley, Alberta.  
 Mine Manager: C. Binder.  
 Mine Surveyor: David Jones.  
 Overman: C. Binder.  
 Thickness of Seam: 9½ ft.  
 Thickness of Cover: 22 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft.  
     x 9 ft. Depth of Slope: 70 ft.  
 Location of Mine: L.S. 5, Sec. 9, Twp. 49,  
     Rge. 17, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 613.  
 Truck Mine.  
 Registered Trade Name: Ryalta Coal.

**WESTLOCK AREA****Thorhild Coal Co.—Mine No. 1517**

Mine Office: Thorhild, Alberta.  
 Mine Manager: John Labitz.  
 Mine Surveyor: David Jones.  
 Foreman: John Labitz.  
 Thickness of Seam: 5 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: N. and S. ½ of L.S. 12 and  
     13, Sec. 12, Twp. 60, Rge. 21, W. 4th Mer.  
 Coal Mining Lease Number: 5275.  
 Truck Mine.  
 Registered Trade Name: Dandy Coal.

**Picardville Coal Co.—Mine No. 1523**

Mine Office: Picardville, Alberta.  
 Mine Manager: A. J. Beardsley.  
 Mine Surveyor: David Jones.  
 Foreman: A. J. Beardsley.  
 Thickness of Seam: 6 ft.

Thickness of Cover: 15 ft. to 24 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: E.  $\frac{1}{2}$  of L.S. 8, Sec. 35,  
     Twp. 58, Rge. 27, W. 4th Mer.  
 Coal Mining Lease Number: 5567.  
 Truck Mine.  
 Registered Trade Name: Picardville Coal.

**Tomlinson & Kaszuba—Mine No. 1562**

Authorized Capital: \$30,000.00.  
 Name of President: F. N. Tomlinson.  
 Name of Vice-President: L. Kaszuba.  
 Name of Secretary-Treasurer: T. Dombroski.  
 Mine Office: Thorhild, Alberta.  
 Mine Manager: T. Dombroski.  
 Mine Surveyor: David Jones.  
 Foreman: T. Dombroski.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 12 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: L.S. 1, Sec. 11, Twp. 60,  
     Rge. 21, W 4th Mer.  
 Truck Mine.  
 Coal Mining Lease Number: S.L. 526.  
 Registered Trade Name: The North Point Coal.

**WETASKIWIN AREA****Peter Gill—Mine No. 1534**

Mine Office: Thorsby, Alberta.  
 Mine Surveyor: L. C. Stevens.  
 Overman: Joe Gill.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 80 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Slope. Size of Slope: 7 ft.  
     x 6 ft. Depth of Slope: 1,000 ft.  
 Location of Mine: L.S. 3 and 6, Sec. 3, Twp. 48,  
     Rge. 27, W. 4th Mer.  
 Coal Mining Lease Number: C.P.R. 533.  
 Registered Trade Name: Canyon Creek Coal.

**WHITECOURT AREA****Alex Watson—Mine No. 1569**

Mine Office: Blue Ridge, Alberta.  
 Mine Manager: Alex Watson.  
 Mine Surveyor: David Jones.  
 Foreman: Alex Watson.  
 Thickness of Seam: 7 ft.  
 Form of Opening: Strip Mine.  
 Location of Mine: Part of L.S. 12 and 13,  
     Sec. 19, Twp. 59, Rge. 10, W. 5th Mer.

Coal Mining Lease Number: 5354.  
 Registered Trade Name: Blue Ridge Coal.

**R. F. Pritchard—Mine No. 1612**

Mine Office: Blue Ridge, Alberta.  
 Mine Manager: R. F. Pritchard.  
 Mine Surveyor: David Jones.  
 Overman: R. F. Pritchard.  
 Thickness of Seam: 3 $\frac{1}{2}$  ft.  
 Thickness of Cover: 100 ft. to 500 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Drift.  
 Location of Mine: S.  $\frac{1}{2}$  of L.S. 1, Sec. 31,  
     Twp. 59, Rge. 10, W. 5th Mer.  
 Coal Mining Lease Number: 5490.  
 Truck Mine.  
 Registered Trade Name: Burnwell Coal.

**Edward Hughes—Mine No. 1681**

Mine Office: Mayerthorpe, Alberta.  
 Mine Manager: Edward Hughes.  
 Mine Surveyor: Edward Hughes.  
 Overman: Edward Hughes.  
 Thickness of Seam: 4 ft.  
 Thickness of Cover: 600 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Adit.  
 Location of Mine: N.  $\frac{1}{2}$  of L.S. 14 and 15,  
     Sec. 35, Twp. 59, Rge. 9, W. 5th Mer.  
 Coal Mining Lease Number: 5708.  
 Registered Trade Name: Athabasca River  
     Hard Coal.

**NO AREA**

**Pinto Creek Coal Mines Ltd.—Mine No. 1616**

Authorized Capital: \$100,000.00.  
 Name of President: W. E. Doupe.  
 Names of Directors: J. L. McCordick, W. E.  
     Doupe.  
 Name of Secretary-Treasurer: V. Black.  
 Mine Office: Wembley, Alberta.  
 Mine Manager: W. E. Doupe.  
 Foreman: W. E. Doupe.  
 Thickness of Seam: 5 ft.  
 Thickness of Cover: 15 ft.  
 Inclination of Seam: Horizontal.  
 Form of Opening: Strip Mine.  
 Location of Mine: Unsurveyed Territory,  
     Twp. 68, Rge. 10, W. 6th Mer.  
 Coal Mining Lease Number: 5421.  
 Truck Mine.  
 Registered Trade Name: Pinto Creek Coal

## THE MINES DIVISION

The following table gives particulars of mines which were in operation during the year 1949 in the Province:

## LIST OF MINES

Mine No.	Operator	Address	Location I.S.S.T.R.M.	Character of Coal	Date of Opening
<b>Ardley Area</b>					
255 R. R. Straub.....	Alix.....	S. W. $\frac{1}{4}$ 3, 4, 5, 6, 15 & 16-33-38-23-4	Sub-bituminous.....	1910	
x809 J. W. Sissons.....	Alix.....	3, 4, 5, 6, 15 & 16-33-38-23-4	Sub-bituminous.....	1919	
969 Karl Sehnopf.....	Delburne.....	14-10-38-22-4	Sub-bituminous.....	1921	
x1018 A. Johnson.....	Ardley.....	3-17-38-23-4	Sub-bituminous.....	1922	
1135 Carl Kurp.....	Delburne.....	4 & 5-7-38-23-4	Sub-bituminous.....	1924	
x1488 Allyn Mann Construction Co. ....	Alix.....	3 & 4-29-38-23-4	Sub-bituminous.....	1935	
x1613 James McDowell.....	Ardley.....	10-20-38-23-4	Sub-bituminous.....	1943	
x1663 Wm. G. Martin.....	Delburne.....	E. & W. $\frac{1}{2}$ , 15 & 16-22-37-22-4	Sub-bituminous.....	1947	
x1673 D. L. Gordon.....	Warden.....	W. & E. $\frac{1}{2}$ , 1 & 2-15-38 22 4	Sub-bituminous.....	1948	
x1675 John Lynass.....	Delburne.....	13- 8-38-23-4	Sub-bituminous.....	1948	
<b>Blg Valley Area</b>					
864 Big Valley Collieries (Alberta) Ltd. ....	Big Valley.....	16-26-35-20-4	Sub-bituminous.....	1920	
x1661 Robert Campkin & Sons.....	Lousana.....	7, 13-13-36-22-4	Sub-bituminous.....	1947	
x1708 George L. Grant.....	Fenn.....	1- 9-35-20-4	Sub-bituminous.....	1949	
<b>Brooks Area</b>					
x1404 Kleenburn Collieries Ltd. ....	Eyremore. ....	22, 23, 26, 27, 34 & 35-36-17-17-4	Sub-bituminous.....	1932	
<b>Camrose Area</b>					
x241 Joe Proskow.....	Dinant.....	4-18-48-19-4	Sub-bituminous.....	1910	
x274 S. H. Burnstad.....	Ohaton.....	N. & S. $\frac{1}{2}$ , 3 & 6-14-48-18-4	Sub-bituminous.....	1917	
1420 Red Flame Coal Co. Ltd. ....	Round Hill.....	N.W. $\frac{1}{4}$ , 19-48-18-4	Sub-bituminous.....	1933	
x1524 George Shute & Partners.....	Dinant.....	8 & 9- 7-48-19-4	Sub-bituminous.....	1937	
x1603 Alberta Coal Co. Ltd. ....	Camrose .....	2, 6, 7, 10-11-15-29-46-19-4	Sub-bituminous.....	1943	
<b>Carbon Area</b>					
53 A. Fox (Kneehill Mine).....	Carbon.....	S.W. $\frac{1}{4}$ of.....	3-14-29-23-4	Sub-bituminous.....	1898
x194 Kneehill Coal Co. Ltd. ....	Three Hills.....	N.E. $\frac{1}{4}$ of.....	4-31-22-4	Sub-bituminous.....	1909
384 Inland Coal Co. Ltd. ....	Three Hills.....	S. $\frac{1}{2}$ of.....	36-31-24-4	Sub-bituminous.....	1913



## THE MINES DIVISION

## LIST OF MINES—Continued

Mine No.	Operator	Address	Location L.S.S.T.R.M.	Character of Coal	Date of Opening
1674	Michael & Martin Wisla	Rosalind	1 & 8- 7-43-17-4	Sub-bituminous	1948
1677	John C. Reed & Son	Edmonton	1- 2-41-16-4	Sub-bituminous	1948
1689	N. MacPherson & D. Kroetsch	Heisler	8-21-42-17-4	Sub-bituminous	1949
x1691	Arthur J. Shannon & J. Lang	Halkirk	11 & 12-19-40-15-4	Sub-bituminous	1949
1694	Wm. A. Jones	Forestburg	16-20-42-17-4	Sub-bituminous	1949
1697	M. R. Muyres & Sons	Forestburg	7 & 10-32-40-15-4	Sub-bituminous	1949
x1698	Joe Hronek, Sr.	Halkirk	4 & 5-22-39-15-4	Sub-bituminous	1949
1702	Dolanz, Dolanz & Strickland	Heisler	3 & 4-27-42-17-4	Sub-bituminous	1949
1703	Michael & Martin Wisla	Rosalind	1, 8 & 9- 7-43-17-4	Sub-bituminous	1949
<b>Champion Area</b>					
136	G. Rhodes	Champion	7- 8-15-22-4	Sub-bituminous	1907
1509	P. Fontana & Sons	Champion	15-33-15-23-4	Sub-bituminous	1937
1565	Mike Popovich	Champion	9- 8-16-23-4	Sub-bituminous	1939
<b>Coalspur Area</b>					
x769	Sterling Collieries Ltd.	Stereo	12-35-47-20-5	Bituminous	1918
771	Foothills Collieries Ltd.	Foothills	2, 7, 10 & 15-24-47-20-5	Bituminous	1918
775	Lakeside Coals Ltd.	Robb	12-14-49-21-5	Bituminous	1918
816	McLeod River Hard Coal Co. (1941) Ltd.	Mercoal	4-25-48-22-5	Bituminous	1920
x1002	Coal Valley Mining Co. Ltd.	Coal Valley	10-25-47-20-5	Bituminous	1922
x1692	King Coal & Lumber Ltd.	Coalspur	7-33-48-21-5	Bituminous	1949
<b>Crowsnest Area</b>					
87	West Canadian Collieries Ltd.	Bellevue	10-20- 7- 3-5	Bituminous	1903
x88	International Coal & Coke Co. Ltd.	Coleman	11- 8- 8- 4-5	Bituminous	1903
xx133	Hillcrest-Mohawk Collieries Ltd.	Bellevue	21- 7- 3-5	Bituminous	1907
199	Beaver Mines Coal Co.	Beaver Mines	10- 3- 6- 2-5	Bituminous	1909
204	McGillivray Creek Coal & Coke Co.	Coleman	2-17- 8- 4-5	Bituminous	1909
x336	West Canadian Collieries Ltd.	Blairmore	10- 2- 8- 4-5	Bituminous	1913
1584	West Canadian Collieries Ltd.	Blairmore	15-31- 6- 3-5	Bituminous	1942
x1695	Hillcrest-Mohawk Collieries Ltd.	Bellevue	7- 6-5	Bituminous	1949

Drumheller Area				
x346	Rosedale Collieries Ltd.	Rosedale.....	14-28-28-19-4	Sub-bituminous.....
367	Midland Coal Mining Co.	Drumheller.....	14- 9-29-20-4	Sub-bituminous.....
402	Red Deer Valley Coal Co.	Drumheller.....	7-29-20-4	Sub-bituminous.....
422	Century Coals Ltd.	Drumheller.....	5- 9-29-20-4	Sub-bituminous.....
436	Rosedale Collieries Ltd.	Aerial.....	7-28-28-19-4	Sub-bituminous.....
620	Newcastle Collieries Ltd.	Drumheller.....	S.E. $\frac{1}{4}$ of.....	Sub-bituminous.....
728	Maple Leaf Coal Co. Ltd.	Drumheller.....	S.W. $\frac{1}{4}$ of.....	Sub-bituminous.....
1258	Brilliant Coal Co.	Drumheller.....	13-29-27-18-4	Sub-bituminous.....
1299	Sask. Federated Co-ops. Ltd.	East Coulee.....	14-10-29-20-4	Sub-bituminous.....
1421	Hy-Grade Coal Mining Co. Ltd.	Drumheller.....	32-27-18-4	Sub-bituminous.....
1436	Royalty Coal Mining Co.	Wayne.....	13-11-29-20-4	Sub-bituminous.....
1484	Century Coals Ltd.	Drumheller.....	13-21-28-19-4	Sub-bituminous.....
1491	Murray Collieries Ltd.	Drumheller.....	N.W. $\frac{1}{4}$ of.....	Sub-bituminous.....
1493	Western Gem & Jewel Collieries.	Cambria.....	S.E. $\frac{1}{4}$ of.....	Sub-bituminous.....
1511	Aetna Coals Ltd.	Wayne.....	1, 2 & 14-15-28-19-4	Sub-bituminous.....
1520	The Minute Coal Co.	Drumheller.....	1-22-28-19-4	Sub-bituminous.....
1570	Wayne Coal Ltd. (Sovereign)	Wayne.....	3, 6 & 11-14-28-20-4	Sub-bituminous.....
1573	Monarch Coal Mining Co. Ltd.	Drumheller.....	8-7-28-19-4	Sub-bituminous.....
1589	Areadia Coal Mines Ltd.	Willow Creek.....	1-20-27-18-4	Sub-bituminous.....
x1599	H. S. Chambers	Drumheller.....	16- 7-28-18-4	Sub-bituminous.....
1655	J. Wakaruk & Partners	Drumheller.....	12-23-28-18-4	Sub-bituminous.....
x1666	Allan Livingstone	Nacmine.....	W. & E. $\frac{1}{2}$ of 9 & 16-16-28-19-4	Sub-bituminous.....
x1668	Victor Leonhardt	Drumheller.....	3-12-29-20-4	Sub-bituminous.....
x1669	Young, Tinsley & Skinberg (Joy)	Cambria.....	11, 12 & 13-18-28-19-4	Sub-bituminous.....
x1688	David H. Jones	Nacmine.....	N. & S. $\frac{1}{2}$ of.....	Sub-bituminous.....
x1700	J. A. McLeod & C. C. Paxton	Drumheller.....	5 & 6- 1-29-20-4	Sub-bituminous.....
Edmonton Area				
91	Ottewell Coal Co. Ltd.	Clover Bar.....	S.W. $\frac{1}{4}$ of.....	Sub-bituminous.....
99	Great West Coal Co. Ltd.	Clover Bar.....	S.E. $\frac{1}{4}$ of.....	Sub-bituminous.....
x129	Sundance Mines Ltd.	Cardiff.....	N.E. $\frac{1}{4}$ of.....	Sub-bituminous.....
428	Banner Coal Ltd.	Carbondale.....	16-14-53-25-4	Sub-bituminous.....
1098	Long Coal Co. Ltd.	Namao.....	10- 8-55-24-4	Sub-bituminous.....
1123	J. E. & J. A. McKinnon	Edmonton.....	4-31-54-24-4	Sub-bituminous.....
1266	Edmonton Collieries Ltd.	Namao.....	13-31-50-26-4	Sub-bituminous.....
1316	Sams Collieries Ltd.	Namao.....	14-36-54-25-4	Sub-bituminous.....
1357	Red Hot Coal Co. Ltd.	Edmonton.....	6-36-54-25-4	Sub-bituminous.....
1366	Beverly Coal Ltd.	Beverly.....	6-13-53-24-4	Sub-bituminous.....

## THE MINES DIVISION

## LIST OF MINES—Continued

Mine No.	Operator	Address	Location L.S.S.T.R.M.	Character of Coal	Date of Opening
x1393	Ottewell Coal Co., Ltd.	Clover Bar.....	Block X N.E. 1/4 of.....	Sub-bituminous.....	1932
x1419	Pine Creek Collieries	S. Edmonton.....	4-25-51-25-4	Sub-bituminous.....	1933
1463	Riverdale Coal Co. Ltd.	Edmonton.....	14- 5-55-24-4	Sub-bituminous.....	1934
1496	G. S. Gwilliam & Sanis	Namao.....	3- 6-55-24-4	Sub-bituminous.....	1936
x1582	Egg Lake Coal Co.	Morinville.....	13 & 14-36-56-29-4	Sub-bituminous.....	1939
1626	J. B. Starkey Co. Ltd.	St. Albert.....	S.W. 1/4 of.....	Sub-bituminous.....	1945
1627	Dickinson, Knight & Dickinson	Carbondale.....	S.E. 1/4 of.....	Sub-bituminous.....	1945
1628	Blue Point Mine.....	South Edmonton.....	17-23-51-25-4	Sub-bituminous.....	1945
x1632	C. F. MacLachlan	Ardrossen.....	N. 1/4 of.....	Sub-bituminous.....	1945
1635	Morinville Collieries Ltd.	Cardiff.....	8 & 9- 2-53-21-4	Sub-bituminous.....	1945
x1636	J. B. St. Martin	Legal.....	1-32-55-23-4	Sub-bituminous.....	1945
1641	A. Horkulak	South Edmonton.....	11 & 14-26-57-25-4	Sub-bituminous.....	1945
x1658	T. Opalinski	Ellerslie.....	9, 10, 15 & 16-26-51-25-4	Sub-bituminous.....	1946
x1684	J. G. Mucha	South Edmonton.....	15-25-51-25-4	Sub-bituminous.....	1947
x1696	Adelard Houle	Morinville.....	10-25-51-25-4	Sub-bituminous.....	1948
			1, 2, 7- 8-36-56-29-4	Sub-bituminous.....	1949
<b>Gleichen Area</b>					
72	Blackfoot Indians	Gleichen.....	Blackfoot Indian Reserve	Sub-bituminous.....	1902
1265	Hans Castella & Son	Standard.....	5 & 12-11-25-22-4	Sub-bituminous.....	1927
1431	H. Rasmussen & C. H. Fleischer	Rosebud.....	3 & 6-26-26-21-4	Sub-bituminous.....	1933
1521	Wm. McMillan	Rosebud.....	14-20-26-21-4	Sub-bituminous.....	1937
<b>Halcourt Area</b>					
651	Baldwin Collieries Ltd.	Grande Prairie.....	15-35-70- 7-6	Bituminous.....	1916
x1633	Wm. Fraser	Halcourt.....	8-21-70-10-6	Bituminous.....	1945
x1704	Michael Romanuk	Dawson Creek.....	N. 1/2 & S. 1/2 of 3 & 6-21-70-10-6	Bituminous.....	1940
<b>Highwood Area</b>					
1625	Hard Coal Producers Ltd.	Turner Valley.....	N.E. 1/4 of.....	15-19- 7-5	1945
x1638	Sheep River Coal	Calgary.....	7-24-19- 6-5	Bituminous.....	1945

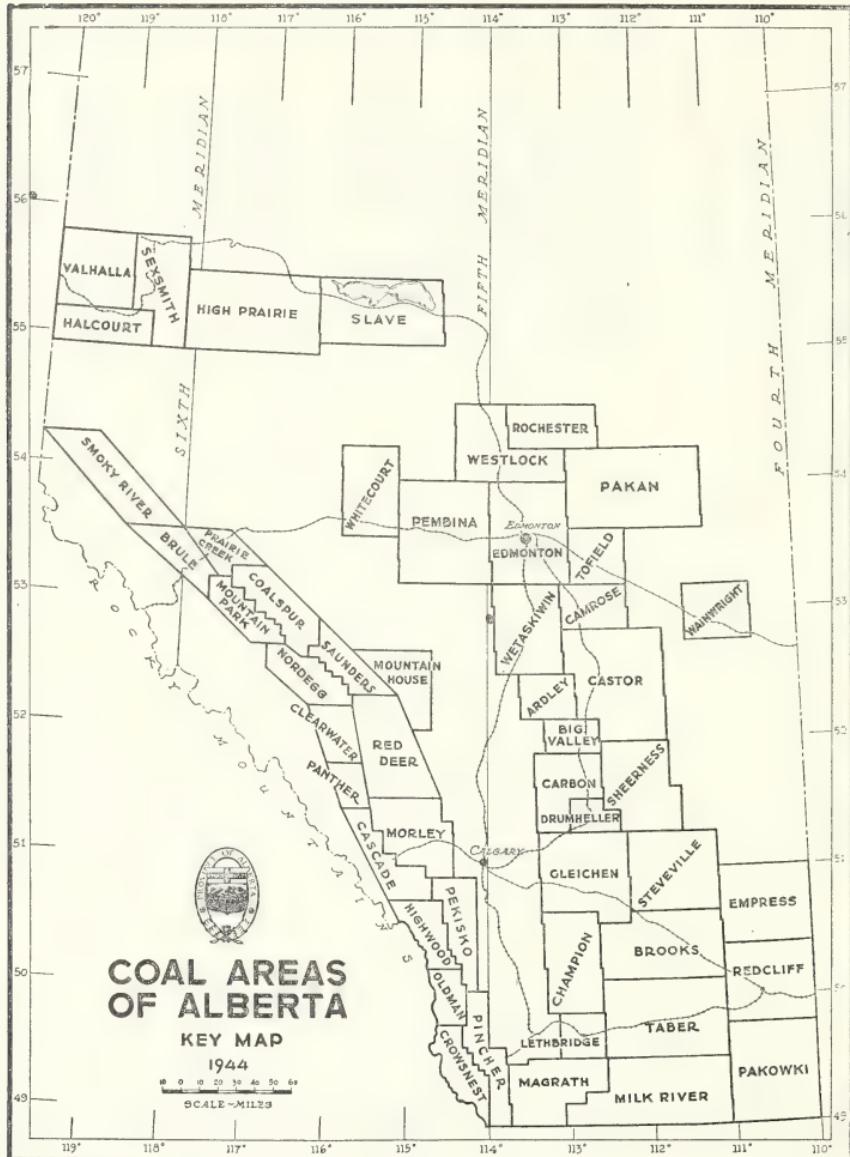
56	A. Razzolini.....	Magrath.....	3- 7- 7-21-4 2 & 7-11- 8-22-4	Bituminous.....
738	J. A. S. Wukisich.....	Lethbridge.....	5 & 12- 8- 7-21-4	Bituminous.....
1086	Steve Kocsis & Steve Varga.....	Lethbridge.....	N. 1/2 of ..... 8-30- 9-21-4	Bituminous.....
1095	J. C. Chester.....	Shaughnessy.....	11-30-10-21-4	Bituminous.....
1263	Lethbridge Collieries Ltd.	Lethbridge.....	5- 6, 10, 12 & 15-24- 9-22-4	Bituminous.....
1464	Lethbridge Collieries Ltd.	Lethbridge.....	Pt. of Soc. .... 18- 7-21-4	Bituminous.....
1581	J. J. Hamilton Coal Co.	Magrath.....	.....	.....
1685	L. C. McClain, Bly & Conrad.....	.....	.....	.....
1301	Thomas Taylor.....	Lucky Strike.....	7, 8, 9 & 10-10- 3-11-4	Sub-bituminous.....
1619	B. Ainsley & Sons.....	Morley.....	Unsurveyed Territory.....	Bituminous.....
		<b>Mountain Park Area</b>		
x282	Mountain Park Coals Ltd.	Mountain Park.....	33-45-23-5	Bituminous.....
x3693	Cadomin Coal Co. Ltd.	Cadomin.....	14-31-46-23-5	Bituminous.....
x2905	Lusear Coals Ltd.....	Lusear.....	7-23-47-24-5	Bituminous.....
x1392	Gregg River Collieries.....	Gregg River.....	8-28-47-24-5	Bituminous.....
1617	Lusear Coals Ltd.....	Lusear.....	27-47-24-5	Bituminous.....
		<b>Nordegg Area</b>		
x256	Brazeau Collieries Ltd.	Nordegg.....	40-15-5	Bituminous.....
1318	M. R. Johnson & E. Davis.....	Elkwater.....	10-23- 8- 3-4	Sub-bituminous.....
1516	G. C. Davies.....	Priddis.....	10- 4-22- 3-5	Bituminous.....
		<b>Pembina Area</b>		
x419	Alberta Coal Co. Ltd.	Wabamun.....	16- 9-53- 4-5	Sub-bituminous.....
x1409	Gainford Collieries.....	Seba Beach .....	36-53- 6-5	Sub-bituminous.....
x1195	Pembina Peerless Coal Co. Ltd.	Entwistle.....	34-53- 7-5	Sub-bituminous.....
x1592	H. C. Lang & R. F. Forbes.....	Seba Beach.....	30-52- 4-5	Sub-bituminous.....
x1644	Strawberry Creek Coal Co.	Warburg.....	16-13-49- 3-5	Sub-bituminous.....
x1645	Lothian Collieries Ltd.	Wabamun.....	10-15-53- 4-5	Sub-bituminous.....

## THE MINES DIVISION

## LIST OF MINES—Continued

Mine No.	Operator	Address	Location L.S.S.T.R.M.	Character of Coal	Date of Opening
1652	N. Fry & T. Larson	Seba Beach.....	16-25-53- 6-5	Sub-bituminous.....	1946
1657	J. Lidgett & L. Ophain	Entwistle.....	.16 & 9-10-54- 7-5	Sub-bituminous.....	1947
x1670	Lothian Collieries Ltd.	Warburg.....	14-13-49- 3-5	Sub-bituminous.....	1948
x1683	Continental Collieries Ltd.	Seba Beach.....	5-33-52- 5-5	Sub-bituminous.....	1948
x1687	James Sturms	Genesee.....	N.E. 1/4 9, 10 & 11-15-50- 4-5	Sub-bituminous.....	1948
1690	Karl Schon & M. J. Hoover	Edmonton.....	4, 5, 6, 11 & 12- 8-50- 6-5	Sub-bituminous.....	1949
x1701	Ralph S. Galley & Sons	Devon.....	N.W. 1/4 of ..... 18-50- 3-5	Sub-bituminous.....	1949
x1709	Edmund Miller	Telfordville.....	12 & 13-33-49- 2-5	Sub-bituminous.....	1949
1440	Rhodes Mining Co.	Lundbreck.....	10-26- 7- 2-5	Bituminous.....	1933
1653	Hinton Hard Coal Co.	Hinton.....	4-29-50-25-5	Bituminous.....	1946
x1706	J. Capostinsky & C. M. Woodley	Hinton.....	50-24-5	Bituminous.....	1949
772	Naco Coal Co. Ltd.	Medicine Hat.....	2- 5-13- 6-4	Sub-bituminous.....	1918
x1707	G. A. Naylor	Medicine Hat.....	1-13- 7-4	Sub-bituminous.....	1949
x1686	Marwood S. Alexander	Edmonton.....	8-11-66-24-4	Sub-bituminous.....	1948
388	Saunders	N. & S. 1/2 of ..... 8 & 9-24-40-13-5	Bituminous.....	1913	
852	Bighorn Saunders Creek Collieries	N.W. 1/4 of ..... 9-27-40-13-5	Bituminous.....	1920	
	Alexo Coal Co. Ltd.				
	Alexo				
x443	Sheerness	S.W. 1/4 of ..... 1-12-29-13-4	Sub-bituminous.....	1914	
486	Chinook Coal Co. Ltd.	6-29-32-13-4	Sub-bituminous.....	1915	
x1314	Little Brothers	1 6-29-14-4	Sub-bituminous.....	1929	
	John Gaetz	12- 5-34-13-4	Sub-bituminous.....	1932	
x1398	T. G. Ironside & A. Glover	Seapa.....			

x1401	Fred Pahl.....	E. & W. $\frac{1}{4}$ .....	7 & 8-30-32-13-4	Sub-bituminous.....	1932
x1432	Sheerness Coal Co. Ltd.....		5-19-29-12-4	Sub-bituminous.....	1933
1553	J. Maciangelo & Partners.....	9, 10, 15 & 16-21-30-17-4		Sub-bituminous.....	1939
x1597	Crystal Mines.....	16-12-29-13-4		Sub-bituminous.....	1943
x1609	J. I. Stirling & W. J. Friedley.....	S. W. $\frac{1}{4}$ of.....	21-30-17-4	Sub-bituminous.....	1949
<b>Slave Area</b>					
x1682	Rybert Pearson.....	Canyon Creek.....	9-21-73- 8-5	Sub-bituminous.....	1948
<b>Taber Area</b>					
672	J. Annon & Popel.....	Winnifred.....	3-27-12-10-4	Sub-bituminous.....	1916
838	D. Mc Cracken & Gorring.....	Alderson.....	7-26-12-10-4	Sub-bituminous.....	1919
x1334	Continental Coal Corporation Ltd.....	Grassy Lake.....	1, 7 & 8-26- 9-13-4	Sub-bituminous.....	1930
1536	Oliver Coal Mines.....	Taber.....	2-18-10-16-4	Sub-bituminous.....	1938
x1604	Southalta Coal Co.....	Taber.....	12-10-17-4	Sub-bituminous.....	1943
x1705	J. P. Neufeld.....	Grassy Lake.....	4 & 5-25- 9-13-4	Sub-bituminous.....	1949
<b>Tofield Area</b>					
x215	Emil Skarin.....	Dodds.....	7-14-49-18-4	Sub-bituminous.....	1909
x252	Tofield Coal Co. Ltd.....	Tofield.....	26-50-19-4	Sub-bituminous.....	1910
x1107	Black Nugget Coal Co. Ltd.....	Ryley.....	15-11-49-18-4	Sub-bituminous.....	1923
1206	Ryley Coal Co.....	Ryley.....	1 & 8- 8-49-17-4	Sub-bituminous.....	1925
1624	C. Binder.....	Ryley.....	5- 9-49-17-4	Sub-bituminous.....	1944
<b>Westlock Area</b>					
x1517	Thorhild Coal Co.....	Thorhild.....	N. & S. $\frac{1}{4}$ .....	Sub-bituminous.....	1937
x1523	Picardville Coal Co.....	Picardville.....	12 & 13-12-60-21-4	Sub-bituminous.....	1945
x1562	Tomlinson & Kaszuba.....	Thorhild.....	8-35-58-27-4	Sub-bituminous.....	1939
<b>Wetaskiwin Area</b>					
1534	Peter Gill.....	Thorsby.....	3 & 6- 3-48-27-4	Sub-bituminous.....	1938
<b>Whitecourt Area</b>					
x1569	Alex Watson.....	Blue Ridge.....	Part of.....	Sub-bituminous.....	1940
1612	R. F. Fritchard.....	Blue Ridge.....	S. $\frac{1}{2}$ of.....	Sub-bituminous.....	1943
1681	Edward Hughes.....	Mayerthorpe.....	N. $\frac{1}{2}$ of.....	Sub-bituminous.....	1948
<b>No Area</b>					
x1616	Pinto Creek Coal Mines Ltd.....	Wembley.....	Unsurveyed Territory.....	Bituminous.....	1943



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